University of Alberta

RELATIONAL PROCESSING THEORY AND INSTRUCTIONAL DESIGN

Designing Writing Resource Materials for ESL Teachers and Students

by

Cynthia Ann Caswell ©

A thesis submitted to the Faculty of Graduate Studies and Research in partial fulfillment of the requirements for the degree of Master of Education

in

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Abstract

Writing resource materials, designed using relational processing theory, were created for ESL teachers and advanced ESL students. Following the R&D model, a preliminary field test (2 reviewing teachers and 4 students) and a main field test (3 classroom teachers and 45 students) were conducted at one institution. Both quantitative and qualitative data on the teacher and student responses to the materials were gathered, analyzed and reported. Eighty percent of the student responses indicated that they considered the exercises helpful for learning the writing process. The main field testing teachers chose different approaches to integrating the handbook with the exercises during classes. Independent use of the handbook by the ESL students was minimal; however, the most self-directed students were clearly able to use it. Qualitative findings regarding the handbook are reported according to the themes of familiarity, usability, and readability. Recommendations for improvements and implementation of the materials in further field testing are also reported.

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Chapter 1: Introduction

1.1 Background to the Research Question

1.1.1 Connectivity Skills and ESL Writing Errors

Students of English as a second language (ESL) face many challenges as they progress through the language learning process. This research addresses one area that is problematic even for many advanced ESL students: low proficiency in English language connectivity skills.

The most common indicator of this problem is the persistence of grammatical errors in the paragraphs, essays or research papers, which advanced ESL students write (Raimes, 1991a; Chimombo, 1986; Bosher, 1990; Hafernik, 1983; Rapp, 1988; Render, 1990; Ferris, 1995b). In my own teaching experience with advanced ESL students, I found that these same errors did not occur, or at least not to the same extent, when the students practised a variety of sentence-level tasks that focused on grammatical connectives individually. The regression in proficiency became obvious when the context of application for the skill extended beyond individual sentences and sentence-combining, and the students had to integrate several types of connectives in their writing or paraphrase things which they had read. Transfer of grammatical knowledge learned through exercises into the writing context is challenging because the students are recalling words from memory rather than manipulating words and sentences that have already been provided. When ESL students attempt to use their knowledge of the English language structure in new contexts, they may produce errors because they incorrectly overgeneralize, using new rules or expressions in contexts where they do not apply (Raimes, 1991b).

Grammatical errors, however, are not the only indicator of low proficiency in connectivity skills, particularly where advanced ESL writers are concerned. The problem also manifests itself in a number of other ways. The persistent use of simpler sentence patterns is another symptom of low proficiency in connectivity skills (Lee, 1993). ESL writers who are unable to use complex structures often fail to make relations between concepts and events explicit, and their texts may seem vague or disjointed to a native-reader. Another manifestation of the problem is overuse of the most common English connectives (i.e., the co-ordinating conjunctions: *and, but;* the subordinating conjunctions: *because, when, then*). This type of usage results in text that is simplistic and repetitive (Schleppegrell, 1996). As well, ESL writing products sometimes reflect ineffective use of English structure and connective devices. One result of this inefficiency is underdeveloped discourse themes (Schleppegrell, 1996). Another result is inappropriate style and tone for the intended text-type (Silva, 1993). Finally, inefficient and inappropriate use of English structure results in loss of the cues that signal the intended reader orientation, and a native reader has difficulty understanding the purpose and organization of the text (Silva, 1993; Allison, 1995; Intaraprawat & Steffensen, 1995).

In English, word-structure plays a significant role in sentence formation. Advanced ESL students can have a fairly expansive vocabulary and have control over a fairly impressive range of connective devices, yet in a variety of instances, still lack the corresponding ability to integrate the vocabulary and the connective devices in ways that fit native-speaker patterns (Norris, 1994; Allison, 1995; Intaraprawat & Steffensen, 1995). Allison (1995) reports, after analyzing 27 essays by advanced ESL writers in her classes and conferencing with them, that ESL writers have "an insufficient grasp of mutual constraints between lexical and syntactic choices" (p.5). Hall (1990) reports a similar finding, on the basis of comparing 4 advanced ESL students' comparative writing proficiency and revision processes in their first languages and in English. Hall (1990) states:

> ...revision plays a role in shaping both the semantics and syntax of sentences in a text; this function deserves special consideration in second language instruction. For the writers in this study, this problem alone consumed most of the energy and time they dedicated to revising. Indeed, testimonies by these writers suggest that not only the meanings of words but also knowledge of how these words shape the structure of sentences are crucial second language skills. Vocabulary and structure, then, complemented each other; instructors should consider ways of teaching them in conjunction (p.57).

Norris (1994) also reported, from conferencing experiences with an advanced ESL writer, that the student had considerable difficulty distinguishing between nominal and verbal forms in English (e.g., relax, relaxation), because one form could serve both functions in his first language (L1). English does have a few syntactic forms which can function in a range of structural positions (e.g., the progressive participle form (-ing) can function as a verb, a noun or an adjective). It also has some word forms which are ambiguous between nouns and verbs (e.g., *work, encounter*). However, the language more often requires that the root form of a word be modified by some form of affixation before it is allowed to be connected into the sentence structure in different positions. The difficulty advanced ESL students experience in grasping constraints between English word-forms and syntactic use affects their writing products. Although these texts are often comprehendible, native-readers still label them as non-native or non-idiomatic (Lane & Lange, 1993).

Zamel (1985) discovered by conferencing with ESL students (in a university level class) about the error corrections on their drafts, that some errors were made when they were selecting words from memory. For example, a student began a sentence with the phrase, *On does moments*, but reread the phrase to the researcher as *On those moments*. A native speaker likely would have written the phrase as *In those moments*. Zamel criticized the fact that the teacher, who corrected the error without conferencing with the student, changed the phrase to *One moment*. This produced a phrase which was a less effective transition device in the over all flow of the paragraph. Zamel's research informs us that the problem ESL students have with connectivity can be exaggerated by the approach that a teacher takes to error correction. Sequences of words in ESL student writing, which appear to be illogical, can in fact be spelling errors which simply produced a different English word than the writer had intended. Norris (1994) also reports, from conferencing experiences in her case-study, that the thinking processes behind the choices of ESL writers are often more complicated than the surface errors on their drafts may indicate.

ESL students produce connectivity errors for a great variety of reasons. At times, those errors or weaknesses remain in their drafts because the students have written their texts under conditions where they were not allowed time to produce multiple drafts and polish their product. Sometimes the errors remain because the students have not been taught the writing process. They do not expect to have to improve on a first draft. Although the teacher points out errors, they are not required to make any further changes on that writing assignment (Zamel, 1985). Similar types of errors can persist for a long time in a student's writing, because it is not that easy for ESL students to correctly generalize (Raimes, 1991a) an explanation about an error in one writing assignment to the structural and vocabulary choices that are made in the next assignment, which usually involves a new topic, a new set of vocabulary, and perhaps also a new text-type. In cases where ESL students attempt the writing process, their final products may still contain errors and weaknesses, because they simply do not recognize them, when they attempt to revise and edit their work (Lee, 1993; Norris, 1994). It is also possible that ESL writers create new errors when they add information to improve the content of their drafts. Such errors are called revising incurred errors (Lee, 1993).

My interest in the problems that ESL students have with English connectivity in their writing was first stimulated by my experience as a teaching assistant in an advanced[1]

---

[1] The course was designed as a 300 level prerequisite which Canadian immigrants could take to by-pass the institution's intermediate courses, if they had already been living in the country for some time. If they passed the course, they would be allowed to take the institution's English 330, after which they could write the government examination for grade 12 English.

ESL reading and writing class, at a college in Edmonton, Alberta. The curriculum for the class was eclectic and designed in house. Reading material was drawn from a number of reading-writing texts and included a science-fiction novel. The writing section of the course focused on the ability to produce well-formed paragraphs in order to prepare the students for essay writing in the next level. The process approach to writing was used. A class set of Pollock's (1982) *Communicate what you mean: grammar for high-level ESL students* was the handbook for grammar exercises, from which we taught the students about co-ordinating and subordinating conjunctions and complex sentence structure.

Some of the ESL students in the course performed very well on the sentence-level tasks yet performed poorly on paragraph writing tasks. Although I was aware of the range of language proficiency that is expected to exist within a group of students, the experience stimulated an appreciation for the challenges that ESL teachers face in meeting the individual needs of their students and some concerns about attitude toward grammar instruction within ESL courses. As the emphasis was on directing the students back to the handbook to find ways to self-correct the grammatical errors in their writing, I was concerned about the tendency of the handbook to present the grammatical form and word choices for conceptual relations through the most stereo-typical and unambiguous cases. I was aware of certain limitations in the handbook and the way that the course materials were integrated because of my training in linguistics. Through this limited experience, I became interested in an important instructional design issue in ESL.

1.1.2 Sequencing Issues in Instructional Design

Direct reference is made in some of the language teaching literature to the large skill gap that occurs in the sequencing of language materials when students are expected to transition from supporting sentence-level grammatical exercises to the writing process (cf. Galloway, 1987; Heilenman and Kaplan, 1985). I had already noticed these types of sequencing gaps in the organization of the materials which had been used in that ESL class. I found even further evidence of these sequencing gaps in some recent process-oriented writing textbooks (e.g., Blass & Durighello, 1985; Palmer, Hafner & Sharp, 1994; Flachmann, Maher, Campbell, Johnson, Magee, 1998b), although the most recent texts demonstrate considerable improvement in terms of integrating grammar teaching with the appropriate stages of the writing process: revising and editing (i.e., Flachmann, Maher, Campbell, Johnson, Magee, 1998a, 1998b).

The ineffectiveness of teaching traditional sentence-level grammar directly in ESL classes, and especially in writing classes, has been a resounding theme for second language acquisition theorist, Stephen Krashen (1978, 1981, 1982, 1984, 1989). Many of the support exercises used in ESL writing texts and grammars are based on discrete item, sentence-level recognition tasks, while the writing process, even at the paragraph level, demands the production of systemic, relational choices and the integration of a variety of grammatical features with fluency. Moving from one task to another requires a huge jump in ability. For example, recognition of the simple past tense for a few verbs that use the -ed ending, using a set of ten unrelated sentences, is a conceptual control task requiring only receptive language ability. Writing a paragraph using the same past tense form is a full control task requiring productive language ability.

Heilenman and Kaplan (1985) recommend that a proficiency-based curriculum be developed so that:

> At each level, certain structures, functions, and topics are taught for *full control,* others for *partial control,* and still others for *conceptual control.* That which is taught for partial control or conceptual control at one level of proficiency will be recycled at subsequent levels where full or partial control will be the goal. (p. 63).

They also emphasize that instructional goals for cyclical development of different degrees of control over the range of proficiency levels (novice through to advanced) should be planned with respect to the four skills of listening, reading, writing and speaking, with attention to cultural relevance.

The gaps that occur in sequencing grammar tasks with respect to those four skills can also be explained in terms of a number of continua. These continua are suggested by Galloway (1987), who addresses the implications of the ACTFL[2] communicative proficiency level guidelines for curriculum and instruction. Galloway suggests that a variety of continua can be grouped under four main components which contribute to language proficiency: 1) function; 2) context; 3) content; and 4) accuracy. I found three of her continua to be highly relevant to the sequencing gap under discussion: 1) in the area of context, the continuum from discrete to integrative; 2) in the area of accuracy, the continuum from linguistic simplicity to linguistic intricacy; and 3) in the area of function, the continuum from recognition to production.

The insights from both Heileman and Kaplan (1985) and Galloway (1987) indicate that the combination of simple sentence-level grammar exercises with extended writing tasks in advanced ESL textbooks would be a sequencing mismatch. Grittner (1990) and Lange (1990) confirm that language teaching syllabi which were based on traditional grammar did cover language grammars systematically. They fit well with sequencing as it is explained in systemic or scientific-technical approaches to instructional development. However, attempts to move from that discrete orientation to the production of more integrative, communicative syllabi, has been difficult, causing considerable tension and debate in the language teaching field.

---

[2] ACTFL is the acronym for the American Council for the Teaching of Foreign Languages.

In my understanding of Galloway's (1987) design recommendations, sentence-level grammatical recognition tasks rightly belong in novice level classes. By the intermediate level, however, it would likely be more appropriate to be trying to assess whether or not ESL students have gained partial control over recognition of multiple grammatical forms for the same concept (e.g., past tense: as regular -ed form; irregular forms, modal forms), with an exercise that involves reading extended text. By the advanced levels, the exercises should be designed to demonstrate that a student has full recognition of multiple grammatical forms for multiple concepts in extended text (e.g., a variety of relational concepts, as designed in this project). In view of these types of recommendations for instructional design, there should be little wonder that sentence-level recognition tasks on individual grammatical forms show little or no relationship to the writing skills of high intermediate and advanced ESL students.

It is tempting to think, on the basis of Krashen's theory, that reading assignments deal adequately with the development of partial and full control of various grammatical forms in the receptive function. However, the achievement of full receptive control over a grammatical form in extended text is not as simple as one might suppose. For example, let us consider acquisition of the past tense. The -ed form is ambiguous, sometimes indicating past tense, other times only indicating the completive (or perfective) aspect. Learning the meaning of the suffix is also related to differentiating between categories of verbs; for example, states and simple actions in past time. Recent research by Anderson and Shirai (1994) suggests that, because the prototypical meaning of the past tense and completive aspect overlap, teachers may think that they are teaching past tense, whereas the students are actually learning the completive aspect. The results of recent second language acquisition research on ESL students' acquisition of the English tense/aspect system emphasize that sentence-level instruction teaches only the forms (Hinkel, 1997; Anderson & Shirai, 1994; Bardovi-Harlig, 1995). What is true for the acquisition of tense is true for many other grammatical categories. Advanced ESL students know many grammatical forms but not necessarily their function or their meanings. The function and meaning of a form can only be properly acquired in contextualized frames. Consequently, it is important to have exercises which are both contextually integrative and syntactically intricate enough to allow the ESL teacher insight into how well advanced ESL students are receptively processing grammatical forms.

According to the guidelines (Heileman & Kaplan, 1985; Galloway, 1987), productive use of various forms should also be sequenced from conceptual control, to partial and full control, within a proficiency level and over the various levels. Although a variety of exercise types are available (e.g., paradigm practise, sentence-level, paragraph-level and sentence-combining tasks), ESL writing textbooks have been criticized for their lack of integration of grammar skills with the writing process. Raimes (1986) criticized the way that grammar is sometimes presented in a bloc or else attached to the reading-writing assignments in an ad hoc fashion. Furthermore, she argued that it is presented as abstract rules and exercises, which never seem to reach the stage of integration with the students' own writing.

Contextually discrete, syntactically simple sentence-level tasks, whether recognition or limited production tasks, are considered ineffective at the advanced language learning levels because many times they are designed so that ESL students can complete them correctly without even reading the sentences. From their language learning experiences, they know that the task follows one limited pattern. Sentence-level recognition tasks often provide only two options, which means that the student has a 50% chance of guessing the right answer. Such tasks are rightly judged as "busy work" (Grittner, 1990).

In Galloway's (1987) terms, tasks that require a single grammatical concept to be recognized or produced in the context of a paragraph would be somewhat integrative but still linguistically simple. If such a task requires verbs to be produced in the one tense only, and the base form of the verbs are provided in brackets, then it can still be completed without reading the paragraph (e.g., Blass & Durighello, 1985, pp. 84-85). Sentence-combining tasks also may vary in terms of their discreteness or integrativeness, depending on how many sentences are being combined, whether or not the logical connectives are given as part of the exercise, and how many types of connectives are incorporated into an exercise or a series of exercises (Zamel, 1980). Some sentence-combining tasks are really more like copying tasks than writing tasks.

The suitability of any of these types of exercises for the most advanced ESL writing classes is questionable. These are courses where ESL students are expected to write essays and research reports. The students are expected to complete full production tasks that are totally integrative, that are syntactically intricate (i.e., they require knowledge of how English connectivity is used to signal a text-type), and that may require extensive recall of vocabulary from memory. The amount of recall required varies from task to task, as some writing assignments do include a reading as a writing prompt. Even when readings are used as prompts, vocabulary recall may still be demanding for ESL writers, because they are required to paraphrase the information in the readings as they summarize, integrate and compare the contents of each source.

The influence of the process approach to writing has resulted in some ESL textbooks including, brainstorming, free writing, revising and editing tasks (e.g., Palmer, Halfner & Sharp, 1994; Pollock, 1982). In the last decade, it has also resulted in the creation of a few specific resources for teaching grammar in relationship to editing (e.g., Raimes, 1988a; Fox, 1992; Lane & Lange, 1993). However, many of the editing and revising tasks are still limited to either sentences or a single paragraph. Some of the revising tasks provide a list of connectives for the student to integrate into the text, rather than requiring them to recognize and generate the relations the way they would need to if they were revising their own texts (e.g., Pollock; 1982, p. 114-115). The editing tasks typically focus on only one or two problem areas. In many cases, the errors are already identified and the students need only to change the mistakes. Fox (1992) and Lane and Lange (1993) are the exceptions; they use a few extended text samples. Those two resources also sequence the exercises so that the students make the transition from working with text that contains pre-identified errors to texts where students have to identify the errors. Fox (1992) makes some attempt to increase the syntactic intricacy of the examples through out the editing guide. In general, I think that these tasks would be suitable for the high-intermediate ESL students or the lower end of the advanced ESL proficiency level. However, I think that more difficult tasks would be appropriate for ESL students at the higher end of the advanced level.

Furthermore, some of these exercises and editing resource materials present a very reduced view of English grammar, because the do not address the relationship of grammar to text-type (cf. Longacre, 1996 on discourse grammar; Larson, 1984 on relational structure and text-type), nor do they adequately address the meaning of grammatical structures. The exception to this criticism would be lesson units on co-ordinating and subordinating conjunctions, which usually address the most common meanings of the most commonly used conjunctions. Nevertheless, these materials generally deal with errors in terms of grammatical categories, with little attention to conceptual constraints on the organization of meaning. These are the constraints that determine how the words of a language interact with its grammatical patterns, and how patterns of structure are interpreted within the context of extended texts of particular types.

My linguistic training in text analysis and relational processing, along with my interest in instructional design, led me to create handbooks and a set of exercises, which might provide a partial solution to this problem. These resources are intended to serve as supplements to the materials presently being used for writing in advanced, academic ESL classes. They are intended to provide for more challenging exercises in English connectivity and for better sequencing of learning experiences for ESL students who are preparing to study in an English speaking university environment. Although, they are designed for writing courses where teachers use a process-oriented approach, they are also suitable for intensive language courses which advocate a communicative approach and have a major writing component in their curriculum. They would be suitable in those situations, provided that the teachers are aware of the process approach to writing and provide opportunities for students to produce multiple drafts on some writing assignments.

Two versions to the handbook were developed: a teacher's version and a student version. The handbooks provide psycholinguistic theory about relational processing in a second language (L2). They also include descriptive categories for relational structure, plus examples of their use in sentences and extended text samples of various text-types. The teacher's version contains a second section comprised of five types of practical exercises, with nine sample exercises in total. Answer keys were developed to provide the potential for the handbook and the exercises to be integrated. Two of the exercise types are based on various types of rational cloze procedures (Bachman, 1982; Bensoussan, 1990; Hanania & Shikhani, 1986; Jonz, 1990; Silberstein, 1991; Alderson, Clapham, & Wall, 1995; Storey, 1997). Revising and editing tasks are also included. The fifth task type requires the student to choose from a randomly ordered set of phrasal verb options and use correct options to complete a paragraph structure. The tasks are sequenced along a continuum from simple recognition and selection to recognition accompanied by differing degrees of limited production. The tasks are more integrative and intricate than the types of tasks that have been previously critiqued, yet they are still less difficult that full writing production. All of the tasks highlight English connectivity issues in relationship to text-types.

1.2 Research Question

My research question focuses upon the responses of ESL teachers and students to preliminary versions of the resource materials, as they can provide significant judgements about the value and suitability of the materials. Field testing of the materials in the classroom is the best way to determine the factors that contribute to effective sequencing in actual instructional settings. The research question is:

> How do ESL teachers and students respond to preliminary versions of resource materials, which are based on relational processing theory and are designed to help instruct ESL students in the skill of English language connectivity, as it pertains to revising and editing in process-oriented ESL composition instruction?

The main research question was divided into subquestions according to the types of materials to which the ESL teachers and students responded: 1) the practical exercises; or 2) the handbooks.

1. Questions related to the sample exercises:
    - 1a) How do ESL teachers rate the sample of exercise types for usefulness with regard to the following criteria:
        - i) general suitability for a writing class in comparison to sentence level and sentence combining exercises?
        - ii) potential for teaching awareness of English connectivity patterns?
        - iii) potential for teaching recognition of connectivity errors in editing cycles?
        - iv) potential for teaching revision strategies that require awareness of connectivity?
        - v) potential for contributing to better connectivity choices in initial drafting?
    - 1b) What do ESL teachers recommend with regard to exercise sequencing, for the following criteria:
        - i) comparative difficulty of the exercise types?
        - ii) exercise length and proficiency level?
        - iii) exercise time limits and proficiency level?
    - 1c) How do ESL students respond to the exercises on the following criteria:
        - i) the appropriateness of the task?
        - ii) the learning achieved through the task?
        - iii) the relationship of the task to revising, editing and writing skills?
        - iv) the time allotted for the task?
        - v) the clarity of the written instructions?
        - vi) the visual appearance of the task?
    - 1d) What recommendations, if any, do ESL students make regarding changes in the task designs?

2. Questions related to the handbooks:
    - 2a) What recommendations do teachers make regarding the presentation of the theoretical material in a student version of the handbook (e.g., amount of examples required; depth of theory to be included?)
    - 2b) How do ESL teachers respond to the descriptive framework provided by the relational categories of conceptual structure?
    - 2c) How do ESL teachers respond to relational processing theory as a framework for explaining the systematic characteristics of English language connectivity?
    - 2d) How do ESL students respond to the preliminary versions of the ESL handbook on relational structure?
        - i) How appropriate is the language for their reading skill level?
        - ii) What are their opinions of the examples?
        - iii) How easy or difficult was it for them to access the information in it?
        - iv) How do they respond to a conceptual-based rather than grammar-based organization of the material?
        - v) How many times did they use it independently?
        - vi) In what contexts did they use it?

1.3 Definitions

In presenting the research question and the background to it, I have used the terms connectivity, relational processing theory, reader orientation, process approach, revising, editing, communicative approach, sentence combining, rational cloze exercise, proficiency level, advanced ESL student, and text-types. Discussions relating to the way these terms are used follow.

1.3.1 Connectivity

The term, **connectivity**, as it is used in this context, is a linguistic term that refers to a language appropriate combination of acceptable patterns of concepts and acceptable patterns of grammatical structure. The notion of acceptable patterning of concepts is expressed by the term **coherence**. The notion of acceptable patterning of grammatical structure is expressed by the term **cohesion**. Consequently, connectivity is more than just knowing how the syntactic categories in a language can be joined together (i.e., more than just cohesion). It is the expression of meaning, the expression of coherent, properly related ideas, through the cohesive devices of a specific language (de Beaugrande, 1980).

The distinction between cohesion and coherence may be difficult to understand for someone who only knows one language, for most of our thinking about concepts is constrained by the way they are expressed through the words and structural patterns of our own language. Nevertheless, there is no one to one relationships between concepts and words of any grammatical type (Nida & Tabor, 1969). This linguistic fact is especially important for the ESL teacher and second language-learner to understand. What appears to be a totally illogical expression in one language may be a totally coherent expression in another. ESL writers are learning ways of relating concepts to words and language structure that are significantly different from the patterns of their native language.

In the literature there is a certain amount of confusion in the use of the two terms, coherence and cohesion, as Halliday and Hasan (1976) define cohesion as the semantic relations of meaning within a text (p.4), yet they also state that language structural relations are distinct from the semantic relations that they express. They note that "parts of a sentence or a clause obviously 'cohere' with each other" (p.6). Halliday and Hasan (1976) justify this unusual employment of the terms cohesion and coherence by specifying the difference between grammatical cohesion and lexical cohesion (p.6). They make this distinction because it is their goal to explain text as a semantic unit in comparison to the sentence as a grammatical unit. They are presenting a certain definition of text, based on various types of semantic relations that join words across sentence boundaries. Lexical cohesion is just one type of relations within Halliday and Hasan's (1976) framework.

Other researchers (e.g., Carrell, 1982; Enkvist, 1990; de Beaugrande, 1980; Archibald & Libben, 1995) note the confusion in the way that Halliday and Hasan introduced these terms. Carrell (1982) argues that cohesion is only a result of coherence not the cause of it. Enkvist (1990) illustrates the difficulty with assuming that lexical cohesion will always produce coherent text and that a lack of it will always produce incoherent text, through the use of mini text samples which illustrate two extremes. The samples are presented in examples (1.1) and (1.2):

(1.1) Incoherent Text with Lexical Cohesion:

> My car is black. Black English was a controversial subject in the seventies. At seventy most people have retired. To re-tire means "to put new tires on a vehicle." Some vehicles such as hovercraft have not wheels. Wheels go round. (Enkvist, 1990, p.12)

(1.2) Coherent Text without Lexical Cohesion:

> The net bulged with the lightning shot. The referee blew his whistle and signaled. Smith had been offside. The two captains both muttered something. The goalkeeper sighed for relief. (Enkvist, 1990, p.12)

Through example (1.1) we understand that lexical cohesion, if it is not properly used does not contribute to the development of a text topic, or the ability to trace the participants, setting and events through out a narrative. Through example (1.2) we learn that a text may still be coherent even though it does not use lexical cohesion or grammatical conjunctions to show logical or temporal relations between the events in each of the sentences. Example (1.2) will be coherent to any reader who understands what a soccer game is and who can apply that knowledge to the interpretation of the text.

Lexical cohesion that operates only on the basis of graphic similarity and not semantic coherence is, in fact, a rarity. Furthermore, the development of coherence in extended text units usually requires the use of grammatical cohesive devices between clauses and sentences. In most texts, coherence and cohesion pattern together in preferred ways for a specific language.

Halliday and Hasan's (1976) work is the English language source on conceptual or semantic relations which is most likely to be familiar to ESL teachers or researchers. Fortunately, their contribution goes beyond lexical cohesion to emphasize other semantic relations and their grammatical manifestations. Consequently, it is not totally incongruent with other contributions in conceptual semantics. With the previous point of confusion clarified, it is possible to define relational processing theory, as it pertains to this study.

1.3.2 Relational Processing Theory

Relational processing theory is founded upon a descriptive framework for conceptual structure that identifies two major types of conceptual categories: relational and non-relational (Nida and Tabor, 1969; de Beaugrande, 1980; Caswell, 1992, 1996). Non-relational entities are concepts that are laden with content (e.g., *dog, horse, house, river*). Conceptual relations (also called coherence relations or discourse relations; cf. Spooren, 1997; Grote, Lenke, & Stede, 1997; Oversteegen, 1997; Sanders, 1997; Bateman & Rondhuis, 1997) provide structure at the level of meaning, independent of the grammatical categories of any specific language. They are concepts which relate or link content items together into a coherent representation of complex thought (e.g., temporal relation - *when;* spatial relation - *along* the river; logical relation - *because*). Both types of categories are necessary to form a **text representation** (Horiba, 1996). It is a two part representation which includes a text-world or a text-base, and a situation model (de Beaugrande, 1980; Zwaan & Brown, 1996). The text-world is a representation of the contents of a text. The situation model is a representation of the organization of a text, including inferences that relate it to background knowledge. Complex text representations are formed in memory as people write, speak, listen or read.

Relational processing theory is a subset of language processing theory that explains how people use relational categories to form mental representations of text and other knowledge structures that help them interpret a text during reading and writing. Researchers in the field of text processing (e.g., Zwaan & Brown, 1996; Horiba, 1996; Gordon & Scearce, 1995; Millis & Just, 1994; Einstein, McDaniel, Owen & Cote, 1990; Carrell, 1984, 1987a, 1987b; Carrell & Connor, 1991) address issues of how relational processing influences memory, inferencing ability, ambiguity resolution, text-type identification and text comprehension. A more in depth discussion of relational processing theory is presented in section 2.3 of the literature review (chapter 2).

1.3.3 Reader Orientation

Reader orientation (Silva, 1993; Allison, 1995; Intaraprawat & Steffensen, 1995) is the relationship between an audience and a message, which the writer of a text intends for a specific text. For example, the reader should be able to identify whether a piece of writing is a description, an explanation or an argument. Reader orientation is conveyed through structural cues, such as culture preferred organizational patterns (e.g., introduction to and use of a general thesis statement early in an expository essay) and certain cohesive devices. Other important cues for academic texts are those which indicate proper recognition of sources which have influenced the writer, as well as cues which signal the author's own ideas, attitudes, and opinions. Other structural cues allow the reader to interpret the strength of the author's beliefs and assertions (e.g., use of modals and adverbs).

1.3.4 The Process Approach, Revising and Editing

The **process approach** to writing emphasizes recursive stages of writing rather than a final writing product. One of the more elaborate versions of the process recognizes five interrelated phases: prewriting, drafting, revising, editing, and publishing. A compact explanation of these phases is provided by Peregoy and Boyle (1997):

> During the prewriting phase, students choose a topic and generate ideas, often through brainstorming and oral discussion. Once they have found and explained their topic, they

> begin drafting. As they compose their first draft they are encouraged to let their ideas flow onto the paper without concern for perfection in form or mechanics. After completing the first draft, students reread their papers and, with feedback from the teacher or their peers, get ready to revise. Revisions are aimed at conveying the writer's ideas as effectively as possible. Finally, the paper is edited for correct punctuation, spelling, and grammar in order to be presented for publishing. (p. 186)

Although the process-oriented approach to writing was first implemented with native-speakers of English (cf. non-ESL sources such as Parker, 1983 and Martin, 1989), it has also been adopted by a number of ESL instructional designers and teachers within the past two decades (c.f. Blass & Durighello, 1985; Farr & Daniels, 1986; Render, 1990; Johns, 1990; Silva, 1990; Peregoy & Boyle, 1993, 1997; Palmer, Hafner, & Sharp, 1994).

As the previous explanation of the process approach (Peregoy & Boyle, 1997) indicates, **revising** is often defined as the step in the writing process where students critique the main and supporting ideas in their text and look for ways to improve the content and organization of their draft. Revising is recursive; students are to expect that they may need to alter their work several times. Advocates of the process approach emphasize that revising often occurs during drafting, as much as between drafts. Although this definition of revising is correct, it is somewhat superficial. On a deeper level, Lee (1993) defines revising as a problem solving process that involves three stages: 1) error or problem detection; 2) diagnosis or conceptualization of the problem; and 3) generation of strategies that produce options for solutions.

The most expanded descriptions of the process-approach identify **editing** as a separate stage from revising (i.e., Peregoy & Boyle, 1997). It is the process of creating the final polished draft of the text, where students concentrate on correcting errors of grammar, spelling and punctuation. Zamel (1985) and Raimes (1991a) voice the rational behind separating revision cycles from editing. The distinction is intended to help writing students understand that meaning-level issues are to be addressed first and that accuracy can be dealt with later in the writing process. It is believed that the tendency to focus on grammatical and mechanical accuracy interferes with the kind of thinking that generates quality ideas in writing and revising (Raimes, 1985). Zamel (1985) argues that revision comments and editing comments are often in conflict with each other, because revision often results in the removal of material that requires editing. If both types of comments are included on the draft, a student tends to correct the grammatical errors rather than rewrite.

While revising and editing can be defined as distinct stages, and a rationale exists for the separation, in practice, not all teachers and students who follow the process approach make this distinction (Zamel, 1985; Lee, 1993). Other versions of the process distinguish only three main stages: 1) prewriting (planning); 2) drafting; and 3) revising (or editing). The terms editing and revising may be used interchangeably from one research article (or thesis) to another. In some cases, the term proofreading will be used when referring to the polishing of a final draft.

1.3.4 The Communicative Approach

The **communicative approach** is a student-centered approach to second language learning and teaching, which emerged from the foreign (second) language teaching community. It emphasizes the development of communicative proficiency (Hymes, 1971) in the learner. Communicative proficiency is the ability to use a language appropriately in real-life settings. According to Grittner (1990), the communicative approach has developed two main streams of adherents, who hold different views regarding the place of grammar in developing communicative proficiency. Adherents in one stream reject the importance of grammatical accuracy and sequencing of learning in favour of making meaning and communicating about interesting topics. They believe that undue attention to accuracy undermines the students' abilities to express meaning and to interact authentically with the cultural and literary content of a language. Adherents in the other stream maintain that grammatical accuracy will not develop automatically. They believe that neglect of accuracy results in communication "in spite of the language" instead of "through the language" (Grittner, 1990, p. 36).

Both groups include reading and writing, as well as speaking and listening, as part of the entire communicative approach to language instruction. Materials and instructional design for a program based on the communicative approach requires genuine content and authentic tasks for the second language learner. For example, rather than just read a text about a textbook character's family, the students would introduce themselves and share with one another about their own families.

1.3.5 Sentence Combining Exercises

Sentence combining exercises are tasks which were added to language teaching techniques to improve connectivity skills and the writing ability of both native-speakers of English and ESL students (Zamel, 1980; Render, 1990; Lundsford, 1990). They became very popular in the 1970s and were commonly included in ESL writing textbooks or grammars in the 1980s (e.g., Mills, 1982; Pollock, 1982; Cobb, 1985; Blass

& Durighello, 1985). These exercises typically involve inferring the relationship between two simple sentences and recombining them into one complex sentence, with the relationship explicitly marked by a connective. The exercises vary in difficulty from combining two or three simple sentences, that occur in unrelated sets, to combining disjoint sentences within a paragraph of text in order to make it more coherent. The latter, more difficult exercise is actually a type of revision task.

1.3.6 Proficiency Levels, Guidelines and Advanced ESL Students

A **proficiency level** is an idealized skill rating for an ESL student. Placement in ESL programs is based on testing, after which the student is assigned to an appropriate proficiency level. The ACTFL guidelines (Byrnes & Canale, 1987) and the Canadian Language Benchmarks (Citizenship & Immigration Canada, 1996) are examples of published guidelines, which were developed on the basis of government intervention into the foreign language and ESL fields, to establish common frameworks for the description and evaluation of language proficiency. With respect to ESL programs, in Canada (and I expect also in the U.S.A.), different programs have been using different names to describe the same level (Peirce & Stewart, 1997). The ACTFL guidelines employs terms such as novice, intermediate, advanced and superior, as main proficiency level designations, with additional divisions within those levels (e.g., novice - low, mid or high; advanced and advanced plus). The ACTFL guidelines recognize a 'distinguished' level as the highest level of reading and listening ability. The Canadian Language Benchmarks are divided into 12 levels, which likely relate to grade levels. The ACTFL guidelines, because they were devised earlier, have an accompanying literature related to curriculum and instruction issues (e.g., Byrnes, & Canale, 1987; James, 1985; Higgs, 1984; Birckbichler, 1990).

The ACTFL definitions (Byrnes, & Canale, 1987) for **advanced language learners** (advanced and advanced-plus) provided an initial, general guideline as to the targeted group for the development of the materials package. Consequently, the level includes teaching on language abilities that are characteristic of the superior level but the students are not necessarily expected to demonstrate complete mastery of those abilities. The definitions for the reading and writing skills of the advanced and superior levels are provided in Appendix 1. However, the definitions are more meaningful when the reader is able to compare them to the definitions for the lower and higher levels; therefore, it is recommended that the reader refer to Byrnes & Canale (1987) for the most recent publication of the guidelines. As is common in a research and development project, this initial guideline was refined with respect to knowledge of the placement program in the actual participating institution.

1.3.7 Text-type

The term **text-type** refers to the form or structure of a text which has been conventionalized to serve a specific social function (Stubbs, 1996).The conventions which determine the characteristics of text types are: 1) the occupational, professional or other social activity behind the creation of the text (e.g., literary, scientific, news media); 2) the illocutionary force of the text (e.g., instruction, argument, description, explanation); and 3) the social or geographic origin of the text-producer (i.e., dialect, register) (cf. House, 1977). The term **genre** is also used at times in the ESL literature to convey the same concept (e.g., Hyon, 1996; Connor, 1996). However, I prefer to use the term text-type because the term genre also has fairly heavy literary connotations (Stubbs, 1996). In the literary context it also includes social and artistic movements in literature, which are evaluated primarily on literary criteria, not functional, linguistic criteria. The relevance of text-type for the writing and reading development of ESL students is already well established in the research literature (e.g., Hyon, 1996; Connor, 1987, 1996; Carrell & Connor, 1991).

1.4 Methodology

The research and development (R &D) paradigm (Borg & Gall, 1989; Gall, Borg & Gall, 1996) has been chosen as the methodological approach for this research project. The paradigm requires that materials which are developed for educational purposes be tested in the field to determine their value and improve their quality. Feedback from teachers and students is essential and invaluable to the materials development process. The research included gathering of a mix of qualitative and quantitative data.

1.5 Delimitations

The scope of this study has been deliberately limited in four ways: 1) the types of materials which were developed; 2) the focus on support for the writing process; 3) the extent of the researcher's involvement in the field testing; and 4) the stages of the research and development process which could be completed.

The handbooks and the exercises were developed as writing resource materials, not core or main curricular materials. They focus on a specific set of subskills important to the writing process: relational processing skills as they pertain to revising skills, and editing skills. Included in these skills is the ability to read in order to detect connectivity errors. The reading-writing relationship in general is very important to the acquisition of literacy in a second language. Identifying and studying the problems that ESL students experience in the reading-writing relationship is a very broad research area. The materials developed here are limited in scope, and they only address the reading-writing relationship with regard to how connectivity skills are relevant to revising and editing ability. There are a variety of reading-writing textbooks and other sources already available to assist ESL teachers, as they try to encourage their ESL students to develop more general skills in reading-writing interaction. These resources are intended to complement, rather than compete with, the existing ESL reading-writing texts.

The classification of the materials as supplementary aides for writing instruction and the focus on the writing process is partially determined by the limits of my expertise in applied linguistics. My training in text analysis and relational processing areas has focused on written rather than spoken language. It would not be appropriate to label the materials as having been developed for the communicative approach to language teaching (e.g., *A Communicative Grammar of English*, [Leech & Svartvik, 1975, 1994]), because the application of relational processing theory has been limited to written expression only. While the theory does have implications for oral communication (cf. Crombie, 1985), that dimension was not developed in the materials.

The handbooks are intended to provide ESL students and teachers with a quick reference to information on English relational structure. They are designed to provide a 'shared language' which will assist teachers and students in discussing connectivity problems in conceptual (meaning-based) terms, as well as grammatical terms. While the teacher-designer-researcher roles are conflated in some studies (e.g., Cunliffe, 1992; Norris, 1994), in this study, the designer, who was already familiar and comfortable with the meta-linguistic terminology used in the handbook, was not directly involved in the field-testing of the materials. Different strategies for using the exercises and the handbook are suggested in the exercise manual, but the teachers and the students had control over how the handbooks were used in the classroom and private study. Specific procedures for using the handbooks were not pre-determined. The allowance for different strategies and modes of use was intended to provide the researcher with some insight into what range of time and what amount of support might be necessary for the teachers and students to use the materials effectively.

With respect to the research and development process, the study was limited to a preliminary and a main field testing stage. The research question addresses the formative stages of the development of the materials. The field testing provided the opportunity for ESL teachers and the students to affirm their usefulness and to critique their strengths and weaknesses, or to reject them altogether. The emphasis was on collecting information that would allow the materials to be improved. While it is possible that these materials may contribute to the development of independent, revising and editing ability, and eventually to improved initial drafting ability for ESL writers, it is not the purpose of this study to prove that they will. The effectiveness of the exercises as a 'treatment' can only be realistically measured and adequately determined through a carefully controlled longitudinal study, which is beyond the scope of a masters thesis. The descriptive statistical findings of the study were important sources of feedback for the purpose of future development of the materials package. However, due to the conceptual emphasis on formative evaluation rather than assessment of student performance, an experimental design was not employed and no tests of significance are reported in the results.

1.6 Limitations

A few limitations, which arose naturally from the context of the research, influenced the outcome of the study. Time constraints, sample size and the language proficiency of the ESL students had a general impact on the study. The researcher's very limited experience as an ESL teacher is also acknowledged.

First, the development of the materials was undertaken with the intent to conduct a main field test in the fall session of 1997, so time constraints had a limiting effect on the quality of the materials. Within the time frame allotted for the materials development, the handbook design was sufficient to illustrate to the ESL teachers and students what the basic organization of the handbook would be. The design was also sufficient for them to get a complete overview of the natural classes and subcategories included in the relational structure framework. Unfortunately, there was not enough time to systematically check the exercise answer keys against the handbook to be certain that follow up examples would be included in the handbook that supported the contextualized use of the relations in the exercises. Weaknesses in the materials which could not be changed between the preliminary and main field tests have been specified in more detail in section 3.2.7. Due to these weaknesses, I thought that integration between the handbooks and exercises might be problematic at times, during classroom use. Consequently, I made a decision to emphasize the use of the exercises more than the handbooks in the main field test. I did not specify requirements for integrating the materials. I decided to let the teachers determine how much they would emphasize the handbook.

Second, ESL teachers are busy, professionals who are paid by the hour, and the summer session at the participating institution was an unusually busy time to be requesting the teachers to volunteer time to preview the handbook and exercises. This resulted in a limited number of teachers previewing the materials and being interviewed, in the preliminary field testing. However, the two teachers who were most interested in reviewing the materials had been appointed to temporary salaried positions at the participating institution, one as a curriculum developer and the other as an academic assistant, during the field testing time period. Consequently, the director was able to grant them work time to participate, so that they were able to spend several hours reviewing the materials (cf. chapter 3 for details). Quality reviewing was gained in the absence of quantity of opinion.

Third, the time frame chosen for the main field testing meant that inservice time was not available to facilitate teacher preparation to work with the materials. In hindsight, however, this was a very minor limitation in view of other timing issues. Access to the participating institution was gained at a time when a change over in the directorship was in process but not finalized. Conducting the field test in the fall session meant that the research was completed before any changes in leadership occurred. Furthermore, the participating institution drew the majority of its ESL student population from Korea. During the fall of 1997 there was a financial crisis in East Asia which seriously affected the January enrollment. A course for the highest proficiency level did not operate during the next term. Had the field testing been delayed for the purposes of gaining an inservice session, there would have been a subsequent loss in student participation. Furthermore, the director did not consider the lack of an inservice time to be a major concern, as teachers at the participating institution taught different proficiency levels on short notice and were expected to be able familiarize themselves with new materials.

Fourth, although the data gathering instruments were piloted and the students involved in the study were advanced ESL learners, the data gathering was affected in minor ways by the fact that a few of the students at times interpreted the questions or statements on the questionnaires in unexpected ways. These unexpected interpretations were made obvious by the reasons and examples that the students used to support their judgements. The data are reported with examples or summaries of student comments, in order to provide as much insight as possible, as to the students' reasons for their responses.

Finally, my experience in teaching in ESL is limited. In spite of my interest in the field, at the time of conducting this research, my experience included limited exposure to ESL students at three proficiency levels: novice, intermediate, and advanced. I spent several months as a volunteer, tutoring a beginning ESL student in her home. I was a volunteer tutor in an intermediate class for one session and held the teaching assistant position in the previously mentioned advanced course for one session.

1.7 Philosophical Assumptions and Issues

I assumed that the ESL student participants responded truthfully on the written questionnaires and in the group discussions. I also assumed that the ESL teachers responded truthfully in interviews and on the report forms.

I constructed these resource materials, having taken the philosophical stance that classroom instruction should include explicit explanations of skills that may be learned and/or reinforced implicitly through activities outside of the classroom. With respect to the writing process, this means explaining the problem solving skills involved in the revising and editing stages.

Krashen (1978, 1981, 1984, 1989, 1994) is well-known in the ESL field for advocating language acquisition (which he claims is implicit) over language learning (which is explicit). However, not everyone totally agrees with his position, as there is also evidence that skills which have been taught explicitly with practise do become automatic and subconscious (Render, 1990; Archibald & Libben, 1995; Brown 1987, 1994). In fact, recent research in second language acquisition and the psychology of learning (cf. Carr & Curran, 1994; Robinson, 1997; DeKeyser, 1997; Ellis, 1994; Berry, 1997) demonstrates a renewed interest in the implicit-explicit learning debate. This research area involves several issues which are not likely to be resolved soon. Nevertheless, Krashen (1984) himself would agree that explicit monitoring of one's writing in revision or editing cycles is appropriate. It simply is not his preferred area of research focus.

1.8 Significance

The significance of this research is the attempt to make information from a systematic area of linguistic inquiry available to ESL teachers and students in a form which has been developed specifically for classroom use. Within the field of language teaching and learning, Alderson (1996) notes that there is a lack of research which addresses teachers' concerns and much of the research which exists is written in such a way that it is inaccessible to teachers. Furthermore, there is difficulty in disseminating research results. A comparable problem exist in the relationship between linguistic research, applied linguistics, and the ESL teachers in the classroom setting. Theoretical linguists have been pursuing their own research agendas and are not concerned with how their research results may be applicable in language teaching (Tyler & Lardiere, 1996). Particularly in areas like generative grammar, rapid changes in the paradigm have occurred at a fairly detailed level. Such rapid changes have been very frustrating to applied linguists and ESL teachers who have attempted to relate the theory to the ESL classroom (Flynn & Martohardjono, 1995).

The area of relational structure and relational processing theory involves both descriptive and theoretical linguistics. The field has a substantial literature, which includes diverse research approaches and areas of application, from applied linguistics in translation (Larson, 1984; Peck, 1984; Longacre 1983, 1986; Cope, 1994; House & Blum-Kulka, 1986; Papegaaij and Schubert, 1988), to Cohesion Theory and systemic-functional perspectives (Halliday & Hasan, 1976, 1985; Berry, Butler, Fawcett, & Huang, 1996), to lexical and conceptual semantics within generative grammar (Jackendoff, 1983, 1987, 1990; Levin & Pinker, 1991), as well as the emphasis on coherence and discourse relations in discourse processing research (e.g., de Beaugrande, 1980; Spooren, 1997; Grote, Lenke, & Stede, 1997; Oversteegen, 1997; Sanders, 1997; Bateman & Rondhuis, 1997). There is considerable overlap between these related research areas in terms of the descriptive categories and the theoretical constructs available. The literature review in chapter 2 discusses the impact that the linguistic research on relational structure and relational processing has had on ESL research and teaching practises.

The intent of this particular research project is to determine how ESL teachers and students respond to writing resource materials which have been developed from a synthesis of categories and constructs, drawn from this extensive range of literature. The materials have been developed using relational processing theory as the foundations for understanding textual connectivity in English. The resources allow ESL teachers to approach connectivity errors from a conceptual view point which is fully textual and to group grammatical errors that are conveyed by different English words under conceptual categories, not just grammatical categories (cf. the answer keys to the exercises in Appendix 2). The materials have the ability to expand a teacher's capacity to identify patterns in student errors. The capacity to deal with errors in terms of patterns is important, as focusing on major patterns of error facilitates the development of self-editing skills in ESL writers (Ferris, 1995b; Bosher, 1990).

The use of terms for relational structure to identify connectivity errors is significant for those who are trying to teach ESL students that their grammatical errors impede communication. Grammar is not meaningless (Larsen-Freeman, 1995). Connectivity errors in a written document mean that the writer has not adequately provided significant relational cues that assist the reader in organizing a complex text-representation and gaining the fullest possible meaning from the written code. Even though a native speaker might be able to infer what an ESL writer intended, grammatical errors and other manifestations of poor connectivity skills in a written product would prevent good ideas from being accepted as high quality work, in most academic and business settings. Advanced ESL students need to learn the skills that will help them revise and edit their work (Raimes, 1991b).

I have attempted to develop more advanced and challenging exercises that are contextually integrative and syntactically intricate and therefore suitable for advanced ESL students. These exercises focus on 'grammar in use' in a variety of text-types. Qi (1994) states: "the controversy over the function and effectiveness of grammar instruction in L2 learning in general and in L2 writing in particular is not yet resolved" (p.4). The field testing of the exercises and the handbook can contribute to the discussion of the relevance of teaching grammar in writing classes. It may give some insight into how much of the problem may be related to instructional design issues (i.e., the tasks are not challenging enough) and how much of the problem is related to the difficulty of working with linguistic meta-language, or terms that only identify grammatical categories rather than conceptual relations (i.e., the language is too technical and does not address meaning).

The relational structure framework, which gives conceptual labels to interact with grammatical forms, is potentially helpful in a second language learning situation because the conceptual labels are not biased by preference to English grammar at the expense of the properties of the first languages of the ESL students. These conceptual categories have already been found to have cross-linguistic relevance by applied linguist translators, who have documented over 1400 minority languages, and by literacy workers who have taught first language literacy classes in many of those languages (CanIL, 1998).

Relational processing theory, as it is presented in the handbook, goes beyond the descriptive framework, into explanations about problems a second language learner may encounter when processing relational items in English. The theory emphasizes how such problems affect the comprehension and production of text for both native speakers and second language learners. The theoretical section has been developed so that ESL teachers, on an individual basis, do not need to spend hours in the linguistic and ESL research literature in order to understand how the findings from this area of psycholinguistic research are relevant to their learners.

1.9 Structure of the Thesis

The main goal of this research was to develop an accessible product. The question of whether or not the exercises and the handbooks are accessible and useful to advanced ESL teachers and students is one which only they could answer. A significant part of the thesis is devoted to their opinions. Now that the boundaries of the research have been established and the significance of the research has been explained, an overview of the remaining chapters of the thesis will be provided. Chapter 2 is a survey of the literature which provides the context for this contribution. Chapter 3 describes in detail the implementation of R & D methodology in the product development and field testing. Chapter 4 reports the teacher and student response to the exercises. Chapter 5 reports the teacher and student response to the handbooks. Chapter 6 summarizes the research and development project and indicates issues and implications for further research.

Chapter 2: Literature Review

2.1 Introduction to the Literature Review

2.1.1 The Organization and Purpose of the Review

The broad organizational structure of this literature review falls into two main areas. Section 2.2 discusses the literature which establishes the relationship between trends in linguistic theory, educational theory, and ESL writing research, with emphasis on instructional design and teaching techniques for ESL composition classes. This survey traces the changes in techniques for teaching writing that have occurred since the 1960s and establishes the context (Tessmer & Richey, 1997) for which new materials must be suitable. It is particularly intended to give the reader an understanding of the process-oriented approach to writing in ESL settings.

In order to discuss the impact of theory on design, Raimes' (1986, 1988b) review of ten ESL writing textbooks from the 1980s and some other recent writing textbooks have been considered along with other second language acquistion and ESL writing literature. However, consideration of a large number of ESL writing materials was purposely limited. The practical constraints of the research and development project indicated that it was best to design the preliminary version of the writing resource materials giving primary consideration to the textbooks that were currently being used in the participating institution.

Section 2.3 reviews the linguistic literature which supports a natural class framework for relation structure and relational processing theory. It discusses the suitability of the framework for application in materials design for process-oriented writing classes, primarily with respect to the preparation of the teacher and student handbooks on relational structure and the supplementary exercises for this research project.

A third area of literature, which has general applicability to this research project is the literature on instructional design for language programs and on language proficiency guidelines. However, its relationship to the current design project is limited because of the supplementary nature of the materials, and the need to limit the design and field testing to a specific proficiency level. Thus this literature is not reviewed in depth, but is cited, where appropriate, in chapters one and three.

2.1.2 Terminological Overlap in the Literature

Linguistics as a field is divided into descriptive and theoretical research, first and second acquisition research, and applied areas. The ESL research literature overlaps considerably with both the language acquisition literature and the applied literature. For that reason the terms ESL and L2 are often used almost interchangeably in this review. The vast majority of the L2 situations cited from the literature in this review refer to situations where English is the L2 involved.[3] The term EFL (English as a Foreign Language) is also occasionally combined with ESL in this review (ESL/EFL) because research concerns in these areas overlap to a large degree. The difference is context. EFL students have learned English in their homeland, which usually implies a non-immersion setting and often implies lack of exposure to Western teaching techniques. Many foreign students in North American undergraduate and graduate programs have come from an EFL background and their transition into the ESL setting is influenced by that background.

2.2 Trends in Linguistic and Educational Theory:

Their impact on ESL writing research and instructional design

2.2.1 A Broad Overview

A sophisticated interrelationship has developed among trends in linguistic theory and educational theory, as these fields have interacted to support language teaching methods and instructional design in ESL. Major trends of influence are identified with varying degrees of overlap by linguists and ESL researchers (Tyler & Lardiere, 1996; Celce-Murcia, 1991; Raimes, 1983, 1988b, 1991a, 1991b, 1991c; Render, 1990; Silva, 1990; Grittner, 1990; Zamel, 1987). The contributions of linguistics to ESL writing research and instructional design have been accompanied by intense debate over the significance of learning grammar in relationship to learning to write and what type of grammar teaching, if any, should succeed the traditional approach (Qi, 1994; Magnan, 1991; Raimes, 1991b; Valette, 1992; Larsen-Freeman, 1992, 1995; Celce-Murcia, 1991, 1992; Krashen, 1984). Over the past forty years, this debate has resulted in a pendulum-like swing in language teaching methods from an intense focus on traditional grammar teaching to an overt rejection of the same in favor of focusing on communication, with consequences for the design and choice of materials for ESL writing classrooms. As might be expected, not all researchers or teachers have agreed with 'the state of the art' regardless of which method was in vogue. Theoretical polemics emerged between teachers and researchers who emphasized the writing product and those who emphasized the writing process (Raimes, 1986, 1988b). Tension also arose because of different views of the status of writing in relationship to language learning. ESL teachers have been criticized for viewing themselves primarily as language teachers, rather than writing teachers (Zamel, 1985). In this decade the pendulum is returning to a point of balance and equilibrium, with researchers calling for a re-integration of grammar into second language teaching, including writing (e.g., Raimes, 1991b; Celce-Murcia, 1991).

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[3] In the case of Horiba (1996), English is the L1 and Japanese the L2. In Zwaan & Brown (1996) and Whalen & Menard (1995), English is the L1 and French is the L2.

The following survey reports on the interacting trends in linguistic and educational theory, acknowledging major contributors and showing the impact of theoretical contributions on the methods and types of instructional design used for teaching writing in ESL. Section 2.2.2 covers the trends and major contributors from 1960 to 1985. Section 2.2.3 deals with the more recent trends from 1986 to 1997. Sections 2.2.4 and 2.2.5 indicate the implications of these trends for materials design and interaction with ESL teachers during this research and development project.

In section 2.2.3, a cross section of the recent ESL literature is considered in order to demonstrate the research areas and issues that are relevant for the development of ESL writing resource materials. Insights, recommendations, and techniques that are suitable for the writing process are presented, without much emphasis on methodological background.The field is currently using a variety of qualitative, quantitative and mixed research methodologies. Studies which use similar methods sometimes have significantly different approaches to a research issue or target a different population. For example, studies on the impact of errors on native speakers choose diffierent native speaker target groups: non-ESL writing teachers (Sweedler-Brown, 1993), professors from the social-sciences-humanities and physical sciences (Santos, 1988), and undergraduate students (Dordick, 1996). Contradictory findings and premature generalizations are evident in the research, and there is a great need for replication of studies (Silva, 1993; Krapels, 1990). In spite of the relatively immature state of the ESL/L2 writing research and theory (Silva, 1990), the trends and findings are relevant to materials design because they do have some influence on the way that ESL teachers and administrators respond to materials.

2.2.2 The Pendulum Swings: trends from 1960 - 1985

2.2.2.1 Focus on form and accuracy

Instruction in ESL composition in the 1960s took the form of controlled composition practise. It was influenced by the audio-lingual method with its behaviorist philosophy of forming correct language habits (Lado, 1964; Render, 1990; Silva, 1990; Raimes, 1991b, 1991c; Grittner, 1990). Lado's (1964) *Language Teaching: A Scientific*

Approach is a classic example of the language teaching philosophy of that time period. Because the audio-lingual method was original designed for the military during World War II, speech was to be mastered before writing. Patterns of sound and sentence units were to be mastered before increasing vocabulary.

Due to the emphasis on correct habits, writing tasks were designed to prevent errors from happening. There was no encouragement for experimentation with the language. At the lower proficiency levels in particular, many of the writing activities incorporated into the instructional materials were actually intended as reinforcement for other language skills or language features. Composition was not practised for any communicative value. Typical 'writing' tasks involved copying, changing tenses, changing agreement marking, changing a dialogue from direct to indirect form, completing composition frames, responding to unrelated questions, or filling in blanks in prose passages. Tasks that involved attempting larger pieces of writing emphasized producing the correct, linear format of an English composition, free from the interference of first language rhetorical patterns. Paragraph and essay writing tasks were based on generalized prescriptive formats for composition stimulated by Kaplan's (1966) original version of contrastive rhetoric (Raimes, 1991a, 1991b, 1991c; Render, 1990; Silva, 1990).

The strongest arguments in support of the controlled composition method were based on its allowance for careful grading and sequencing of language patterns and its contribution to student self-image as successful language learners. However, unanimous support for controlled composition never existed within the field (Render, 1990). For example, Erazmus (1960) and Briere (1966) recommended that intermediate students should be encouraged to pursue free composition, regardless of the fact that their limited English language proficiency would result in the production of errors. Zamel (1987) and Raimes (1983) were two predominant ESL teacher-researchers who influenced the field in favor of free-composition, which eventually became fully identified with the process-approach to writing (Render, 1990; Silva, 1990).

ESL teachers were open to change because they were dissatisfied with the audio-lingual method. Outside of the military context, it did not produce the results that were commeasurate with its claims (Grittner, 1990). The excessive control, immitation, and memorization, rarely translated into real communicative ability for the students.

2.2.2.2 Focus on creativity and process

By the mid 1970s, the debate between controlled and free composition in ESL began to give way to the influence of educational research on process-oriented writing, which had been conducted with native speaking English composition students (Zamel, 1987; Render, 1990; Raimes 1991a, 1991c; Silva, 1990). This change was supported by philosophical shifts in the field linguistics which originated with Chomsky (1957, 1965, 1975) and Hymes (1971). The rapidly developing theory of Chomskyan transformational grammar, which was pursuing issues of 'idealized' native speaker competence, undermined the behaviorist philosophy of language learning as a set of reinforced habits. Habit formation was replaced with the view of language learners as active participants in creating their own grammars. Chomsky's comparatively creative, mentalist approach to structural competence was further complemented by Hymes' (1971) theoretical construct of communicative competence, which emphasized the ability to use language form for communicative purposes (Tyler & Lardiere, 1996). Over time the construct of communicative competence, which encompassed discourse and the context of language use, became even more important to theories of language learning and teaching. It was evident that the sentence-level emphasis of transformational grammar was too constrained to be an adequate theoretical basis for the development of literacy skills and too technical to use directly in the classroom. Tyler and Lardiere (1996) emphasize that Hymes' contribution had substantial impact on language learning and teaching. It stimulated the whole language approach in education, the process approach to writing in L1 composition, and the communicative approach in second or foreign language teaching.

2.2.2.3 The Monitor Model for L2 acquisition

During the late 70s, Krashen's "Monitor Model for Second-Language Acquisition", which was highly influenced by the prevailing linguistic trends, also made its debut in L2 acquisition research (Krashen, 1978). For a full explanation of the model and its implications for ESL writing research and teaching, I direct the reader to Krashen's (1984) *Writing, research, theory, and applications.* In his model, Krashen contrasted unconscious acquisition of a second language with formal learning of that language, and he claimed that what is learned can not become acquired. He argued that formal learning only allows the student to monitor their language, whereas providing the right level of 'comprehensible input' stimulates acquisition. Render (1990) interprets the implications of Krashen's model for ESL writing as follows:

> Speaking and writing, as opposed to mechanical drills, come from a person's acquired language. Conscious correction of language comes from a person's learned knowledge of language, which is only available as an editing device or a monitor. (p. 120)

Krashen's theory initiated a powerful reinforcing influence for extreme approaches to process-oriented writing which argued against any use of formal grammar teaching in the classroom. Archibald and Libben (1995) attribute the reduction of overt error correction L2 classrooms to Krashen's influence. They also note, however, that Krashen would sanction some use of formal grammar teaching in ESL because of the adult ESL students' expectations, which relates to the 'affective filter' construct within his model. The affective filter deals with the students' emotional needs to be relaxed and motivated in order to learn. While Krashen did not consider grammar drills relaxing or motivating or valuable, he did acknowledge that adult students expect grammar instruction. Consequently, he conceeded that it may be necessary to provide it, in order to meet their expectations and indirectly motivate them to aquire the language. Krashen (1984) agrees that explicit grammar knowledge can be useful for revising and editing, but implies that only very limited grammar knowledge is available for this stage of the writing process. His view of grammar rules is very focused and limited. It places no emphasis on relationships between concepts and meaning. It does not encourage the view that resources could be developed which would be helpful to the ESL writer in learning to revise and edit (cf. Krashen, 1982).

2.2.2.4 Cohesion theory

Another significant linguistic contribution of the mid-seventies, which had substantial influence on ESL research in the 1980s, was Halliday and Hasan's (1976), *Cohesion in English.* Cohesion theory is the theoretical framework which most ESL researchers and some ESL teachers would think of whenever the concept of textual connectivity is raised with respect to reading and writing. The theory describes four types of cohesive devices found in text and explains how these devices contribute to the coherence of text structure by signalling semantic relations between the concepts in the text. Carrell (1982) provides an excellent and suscinct summary of the types of cohesive devices presented by Cohesion theory:

> (1) **reference**, including antecedent-anaphor relations, the definite article *the*, and demonstrative pronouns; (2) **substitution**, including such various pronoun-like forms as *one, do so,* etc. and several kinds of ellipsis, (3) **conjunction**, involving words like *and, but, yet,* etc., and (4) **lexical cohesion**, which has to do with repeated occurrences of the same or related lexical items (p. 481 - emphasis mine).

Cohesion theory has been applied in various ways in ESL writing research. It has been used in the evaluation of writing products (Render, 1990; Carrell, 1982; Connor & Johns, 1990; Jafarpur, 1991). It has also been the source of theoretical constructs for the design of rational (Bachman, 1985) or text-driven (Farhady & Keramati, 1996) cloze test constructions. Parts of the framework have also been implemented by individual teacher-researchers in teaching ESL process-oriented writing (Hafernik, 1983; Chimombo, 1986), and ESL reading (Lubelska, 1991; Goldman & Murray, 1992).

While Halliday and Hasan's (1976) contribution has been used extensively in ESL research, it has also engendered some controversy with respect to its accuracy and usefulness in teaching and evaluating ESL writing. The theory is valued in ESL writing research because of its emphasis on text as a semantic unit with a functional purpose. The framework also provides the ESL teacher and researcher with explicit terms and mechanisms for analyzing text. However, certain areas of the theory have yielded questionable results in ESL/L2 research for the following reasons:

1) the definitions of cohesion and coherence have been confusing (Carrell, 1982; Archibald and Libben, 1995 - cf. section 1.3.1 for a discussion of problem);
2) it assumes at least average native speaker competence in text production and, as a result, places heavy emphasis on analyzing for the quantity of cohesive ties rather than the quality of their use (Jafarpur, 1991; Tyler, 1995; Reynolds, 1995); and
3) it is primarily descriptive and sociolinguistic, not accounting for processing issues like the impact of culture and background knowledge on L2 learner's processing of text (Carrell, 1982).

Halliday and Hasan published an update of Cohesion Theory in 1985 entitled *Language, context, and text: Aspects of language in a social-semiotic perspective*. However, that particular version of the theory did not include or update the descriptive framework for semantic relations which was associated with their explanation of the role of conjunctions as a cohesive device. In spite of the fact that it is dated, many linguists and L2 researchers still use their 1976 publication because it is a semenal work in terms of the descriptive categories it provides.

Halliday is considered the founder of systemic functional linguistics (cf. Berry, et al., 1996). This tradition is dominant in Britain and in Australia, where Halliday has spent the majority of his professional life. *Cohesion in English* (1976), which he co-authored with Hasan, was written as primary contribution in the field of lingusitics. It deals with many issues involved in establishing discourse (text) analysis as a viable research area in contrast to sentence-level analyses. The contribution was not intended for direct use in the ESL classroom.

2.2.2.5 Grammatical consciousness-raising

Early in the 1980s, the concept of 'grammatical consciousness-raising' was introduced as an alternative to traditional methods of grammatical instruction (Sharwood Smith, 1981; Rutherford, 1987). Consciousness-raising involves a variety of techniques by which the teacher draws L2 students' attention to the linguistic structures of the language they are trying to learn. While the failure of traditional grammatical instruction was acknowledged, the value of instruction itself was maintained. Krashen's distinction between acquisition and learning was not totally accepted, because other empirical research indicates that concepts which have been learned can become automatized to the point where they are unconsciously used, as they would be when acquired (Archibald & Libben, 1995; Brown, 1987, 1994). The need for contextualized grammatical instruction that was compatible with communicative purpose was apparent, but grammatical consciousness raising did not exert a significant balancing influence on the trend at that time. With the primary emphasis on communicative competence, most writing tasks were deliberately shifted away from being a "forum for practicing particular grammatical constructions" to "purposeful communication between a reader and writer" (Tyler & Lardiere 1996, p.277).

2.2.2.6 The impact of changing trends on materials and instruction

The major philosophical shifts described previously -- from correctness to creativity and communication, and from learning to acquisition -- made tolerance for error acceptable. As a consequence, ESL writing methodology also began to shift toward techniques that enhanced communicative proficiency and were consistent with a process-oriented approach. Typical writing tasks during this period were sentence-combining and sentence-expanding exercises, paragraph and summary writing, and essay response exercises which based writing on extended reading (Blass & Durighello, 1985; Cobb, 1985; Zamel, 1980; Mills, 1982; Kaplan & Shaw, 1983; Silva, 1990).

As Lundsford (1990) points out, sentence-combining tasks were in existence before the Chomskyan revolution, but they gained theoretical validation through the transformational concept of embedding. Furthermore, these tasks became a popular teaching tool because they were seen by some ESL researchers and teachers as a replacement for formal, traditional grammar teaching, which was not viewed as having any valid impact on writing improvement (Qi, 1994; Zamel, 1980).

Even though sentence-combining tasks became popular during the 1970s and 80s (e.g., Mills, 1982; McDonald, Orsini, & Wagner, 1985; McDonald & Orsini, 1985), the limits of their contribution to writing skills and the difficulties that they pose for ESL students were identified clearly. Zamel (1980) argued that these exercises assume a level of grammatical competence that ESL students may not have. ESL students might still need basic instruction in simple sentence grammar and in the use of conjunctions before they would be able to complete sentence-combining exercises successfully. In other words, the fact that sentence-combining exercises contributed to an increase in syntactic complexity and/or maturity in native speakers' writing did not mean that they would automatically do the same for ESL students.

Because sentence-combining exercises were still considered too mechanical with respect to the rhetorical and communicative goals of writing instruction, sentence-expanding exercises were recommended to allow more freedom in student expression, (Zamel, 1980). In sentence-expanding exercises students supplement base sentences with different types of modifying constructions that add to the meaning of the sentence. The additional content is not specified, rather the student must independently generate it. As a consequence, sentence-expanding exercises were seen as potentially more beneficial than sentence-combining tasks because they develop ESL writers' structural skills in combination with free choice of content, which is closer to the real writing task. However, Zamel concluded that some combination of both types of exercises may be a useful tool for teaching writing to ESL students, so long as the students have basic English grammatical competence and teachers use the tool without neglecting other aspects of the composition process.

The influence of Kaplan's contrastive rhetoric continued in textbook design through out the 80s (Silva, 1990), likely due to the discourse basis for the approach. The effects of cohesion theory on materials in North America are not always clearly discernable, due to the interrelatedness of contrastive rhetoric and cohesion theory (cf. Connor & Johns, 1990). For example, Kaplan collaborated with Shaw to produce *Exploring Academic Discourse* (1983), a textbook designed for advanced ESL students. The textbook includes sections on cohesion and coherence. It places a mixed emphasis on rhetorical structure and the use of cohesive devices. Some of the exercises in the text are labelled as writing tasks but are clearly only matching and copying tasks. This type of labelling identifies the materials as still placing more emphasis on control and form, than free writing.

Another ESL writing text from the mid-80s, *Process and Pattern: Controlled Composition Practise for ESL Students,* (Cobb, 1985), also demonstrates that the influence of controlled composition was still present in ESL materials, although there is some mention of process in the text. Each unit begins with analysis of model paragraphs, some of which lack authenticity in communicative value (e.g., comparing a coffee cup and a measuring cup). The students are to analyze the models and complete a guided writing practice, and then progress to free writing. The total series of writing tasks is organized by text-types (i.e., narrative, descriptive, expository, illustration and example, cause and effect, argumentation, etc.). Sentence-combining exercises are included at various points through out the series of writing tasks. By the end of the textbook, essay structure with multiple paragraphs is introduced and the analysis of model paragraphs is expanded to critical evaluation of short, multi-paragraph texts. The text also includes an outline of English grammar and guide to spelling American English.

From Concept to Composition: Reading and Writing for ESL Students (Blass & Durighello, 1985) uses professional and academic reading texts, includes sentence-combing exercises, gives limited attention to text-organizational factors and linking words (i.e., rhetoric and cohesion) and briefly teaches a few concepts from the process-approach, such as brainstorming, freewriting, and revision.

Raimes (1986, 1988b) provides a critique of 10 ESL writing texts, published from 1983 to 1986 (including the three previously mentioned). She considered the following criteria: 1) implementation of the process approach; 2) choices regarding form and content; and 3) integration of grammar with teaching of the writing process. In her estimation, the textbooks exhibited varying degrees of integration and validity in their representation of the process approach. Some of the integrations were judged to be very superficial (e.g., Cobb, 1985; Kaplan & Shaw, 1983; Blass & Durighello, 1985). Heuristics that were used to guide the revision process were too general and did not emphasize to students (or teachers) that revising is a skill which is largely text specific. Her judgement of the materials demonstrated a preference for textbooks that employed both professional/academic samples and student examples of writing (e.g., She criticized Cobb [1985] for artificially constructed examples of rhetorical form). Textbooks that provided students with choices about writing topics, rather than dictating predetermined content, were also considered superior. She reported that the approaches to grammar in the textbooks also varied between providing bloc units (Cobb, 1985) and ad hoc additions (Kaplan & Shaw, 1983; Blass & Durighello, 1985), noting that both types did little to assist the teacher in dealing with grammar issues in the context of student writing. While Raimes (1986, 1988b) acknowledged that some of the textbooks may have been created for political contexts where the process approach could not easily be implemented, she also suggested that ESL teachers should not look to textbooks to be the primary sources for the ESL writing classroom. She emphasized the notion of students' own writing as the primary source materials for the writing class, and the necessity of dealing with grammar and errors in the context of student writing.

Systemic functional linguistics had a substantial impact on circulum design in language teaching for adult migrant English education and workplace training programs in Australia. However, many of the models and materials for these frameworks are difficult to access outside of that country (cf. Hyon, 1996 for more details). *A Communicative Grammar of English* (Leech & Svartvik, 1975) was probably one of the earliest grammar handbooks for advanced ESL students, which emphasized grammar use and conceptual notions. The authors attribute part of the focus of the grammar to Halliday's research on the 'functional' approach to language.

Grittner (1990) notes that designers of the functional-notional syllabi, which were attempting to implement the communicative approach in instructional design, had difficulty establishing grammar sequencing in the materials. These syllabi were general language learning materials not specifically ESL reading-writing textbooks. The difficulty with grammar stemmed partially from the desire to teach spoken communication authentically and partially from the inclusion of extended discourse samples in the syllabi at earlier proficiency levels. Grittner (1990) notes that standard, traditional grammar, which is oriented toward writing and publication requirements, was viewed by some teachers, as being primarily a receptive skill. Emphasis on communicative competence resulted in teaching colloquial and standard usage, with the additional requirement of helping language students to be able to switch between types of usage. Furthermore, Grittner reports that early attempts to specify content relative to the constructs of 'communicative competence' and 'language proficiency' led only to unlimited, arbitrary choices. Consequently, field testing of new materials with teachers in specific settings has been and continues to be important within the communicative approach.

2.2.2.7 Summary

Changes in linguistic and educational theory (Tyler & Lardiere, 1996; Raimes, 1983; Raimes, 1991a, Silva, 1990) during the 1960s and 1970s began to influence ESL researchers and teachers to study and adopt the process approach to writing (e.g., Raimes, 1983, 1985; Zamel, 1987). With the emergence of communicatively-oriented approaches to teaching language and writing, methods that focused on error correction, traditional grammar teaching, and emphasis on rhetorical form, came under serious scrutiny (Raimes, 1983; Zamel, 1987). By the mid-1980s, Raimes (1986, 1988b) surveyed the effect of theory on the process approach to writing on ESL reading-writing textbooks and found that materials development lagged behind the theoretical changes. Techniques that affected materials development lagged behind the theoretical changes. Techniques that affected sentence-level grammar and paragraph formation, such as sentence-combining and expanding exercises, were fairly easily integrated into new materials or were developed as resources (e.g., Mills, 1982; McDonald, Orsini, & Wagner, 1985; McDonald & Orsini, 1985). However, Raimes (1986) criticizes the ESL reading-writing textbooks from the early 1980s for being superficial in their representation of the writing process and weak in providing writing teachers with assistance in integrating grammar with the process. Raimes (1986) also commented on the polemics in the field, warning that it was unproductive for ESL teachers to take extreme stances on process versus product views of writing and an all-or-none approach to grammar teaching.

2.2.3 Current Trends: 1985 - 1997

2.2.3.1 Focus on content or the reader

In ESL classrooms, the process-approach was not embraced wholeheartedly (Raimes, 1991b; Silva, 1990). During the mid-1980s, the content-based and reader-based approaches were soon suggested as alternatives to what was viewed by some researchers and teachers as a non-academic and self-indulgent approach to writing, due to the conflation of expressionist approaches to writing with the process approach (Raimes, 1991b; Connor, 1996). While the method of using multiple drafts and the need for revising were being gradually being accepted in ESL classrooms, some ESL writing researchers were recommending that the relationship of reading to writing and the challenges of writing for an academic discourse community should given priority over student self-expression (Silva, 1990; Raimes, 1991b; Morley, 1991; Johns, 1990). This priority was demonstrated by an increase in programs offering English for academic purposes (EAP) and English for (career) specific purposes (ESP), for graduate students who are non-native speakers of English (Morley 1991; Johns & Dudley-Evans, 1991; Leki & Carson, 1994, 1997). This educational trend was also paralleled by a shift in the type of linguistic theory applied to ESL writing research.

2.2.3.2 Reading-writing research

By the mid-1980s, psycholinguistic contributions such as schema theory and text-processing theory were being implemented in ESL research on reading and writing. Carrell and other researchers used such theories to explain the effects of culture and background knowledge on L2 reading. It became a research prority to understand the impact of L1

1989, 1991; Carrell, Pharis, & Liberto, 1989; Carson, Carrell, Silberstein, Kroll, & Kuehn, 1990; Carrell & Connor, 1991; Roller & Matambo, 1992; Zamel, 1992; Fitzgerald, 1995; Hedgcock & Atkinson, 1993; Sasaki & Hirose, 1996; Horiba, 1996). Text-type specific research projects (e.g., Carrell & Connor, 1991; Goldman & Murray, 1992; Sasaki & Hirose, 1996) are evident in the ESL reading-writing literature, reflecting the enduring influence of the communicative, sociolinguistic paradigms in tandem with the new psycholinguistic emphasis.

Carrell's research from 1984 to 1991 can be seen to some extent as a result of her original criticisms of the implementation of Cohesion Theory (Halliday & Hasan, 1976) in ESL/L2 writing research. Her original position was highly critical of the theory's emphasis on the surface features of the text and the lack of adequate attention to background knowledge and text processing issues. She was also critical of ESL teachers and researchers who seemed to believe that the theory would provide answers to ESL composition and reading problems (Carrell, 1982). However, after conducting extended research in ESL reading and the reading-writing relationship, Carrell has taken a more balanced stance toward cohesive devices (e.g., Carrell & Connor, 1991). She recommends that ESL students be taught explicitly about the rhetorical organization of text and that they be taught how to signal that organization through English linguistic devices. Explicit knowledge of how cohesive devices signal text organization facilitates both ESL reading and writing.

Some of these recent reading-writing research reports (e.g., Carrell, 1987b; Carrell & Connor, 1991; Horiba, 1996) emphasize that language specific use of cohesive devices is related to text organization. Such findings are noteworthy because ESL writing researcher-teacher, Vivian Zamel, once argued that there is no relationship between grammar and rhetorical organization (i.e., Zamel, 1980). More recent research (Evensen, 1990; Carrell & Connor, 1991; Goldman & Murray, 1992; Geva, 1992) indicates that conjunctions, in particular, are cohesive devices which are important for signalling a text's rhetorical structure, and therefore, must be comprehended and produced effectively by ESL students.

2.2.3.3 Focus on balance

The early 1990s appear to have been a time of assessment regarding the impact of theory on the teaching of language generally, and the teaching of writing specifically. One of the themes of the 1991 Georgetown University Round Table on Language and Linguistics was the need to adhere to a balanced stance instead of taking extreme positions on the issues of accuracy and fluency in language learning (e.g., Celce-Murcia, 1991; Raimes, 1991b; Magnan, 1991). Similar themes were being considered in relationship to curriculum development and communicative proficiency in foreign language teaching (Grittner, 1990; Lange, 1990). Leaders in the fields of language teaching and ESL (Render, 1990; Raimes, 1991a, 1991b; Silva, 1990) were emphasizing that a policy of focusing on meaning to the point of disregarding accuracy, which had been practiced by some adherents of communicative approach to language teaching and the process approach to writing, did "not produce linguistic accuracy as an incidental by-product of fluency" (Celce-Murcia 1991, p. 224). ESL writing researchers began to synthesize features from competing theoretical approaches to suggest a more comprehensive framework for L2 writing than the individual theories presented. Consequently, since the early 1990s, ESL writing researchers emphasize that the form (linguistic structure at all levels), the writer, the content, and the reader must all be valued appropriately when teaching ESL writing (Raimes, 1991b; Silva, 1990).

2.2.3.4 Contrastive rhetoric and sociocultural research

It is expedient to briefly mention contrastive rhetoric again because of its enduring impact on ESL reading-writing textbooks (Silva, 1990), in spite of criticisms in the ESL writing literature about overly simplistic representations of rhetorical form (Raimes, 1986). Although this area of linguistic research, which began with Kaplan's 1966 contribution, cannot be credited with providing a pedagogical method (Raimes, 1991b; Silva, 1990), it continues to influence ESL writing research and reading-writing textbooks, likely because of its dual focus on culture and discourse (Thompson-Panos & Thomas-Ruzic, 1983; Purves, 1988; Silva, 1990; Becker, 1995; Connor, 1996). Differences in cultural perception about what good writing is (Kobayashi & Rinnert, 1996; Duszak, 1995), and cross-cultural versus language-specific strategies in approaching topic development, text-type formation and revision strategies (Hinds, 1990; Fox, 1994; Reid, 1996) are examples of current research topics in contrastive rhetoric and socio-cultural studies of writing. Issues from contrastive rhetoric are actually integrated with the reading/writing research (Carrell, 1984, 1987a, 1987b; Fitzgerald, 1995) and appear as a secondary consideration in understanding peer-interaction during revision sessions and the products of ESL students in process-oriented composition classes (Becker, 1995; Connor, 1996).

2.2.3.5 Research on writing errors

The changing trends in writing theory have been accompanied by changing views regarding errors. Raimes (1991a, 1991b) summarizes the changes. With controlled composition methods, errors were avoided. With the shift to the process approach to writing, risk taking was encouraged and errors were tolerated, and in some cases, ignored. Raimes (1991a) acknowledges that ESL teachers can not afford to ignore grammar errors and expect that they will disappear over time. She emphasizes that many advanced ESL students need to improve the accuracy of their written English within only one or two semesters. They are competing academically with native speakers and they need to develop skills for dealing with errors in their writing.

Consequently, Raimes (1991a) and other ESL researchers (e.g., Ferris, 1995b; Bosher, 1990; Hafernik, 1983) recommend that ESL teachers encourage the development of self-editing skills in their students. The shift of responsibility for error correction from teachers to students is not just the result of a philosophical shift in writing theory. Teacher correction of student errors appears to have minimal impact in improving student writing, especially considering the time teachers must invest to make the corrections (Robb, Ross, & Shortreed, 1986). There has also been concern that teacher corrections build dependency (Ferris, 1995b), although some researchers consider a certain amount of dependency to be feasible for intermediate or 'unskilled' writers (Storch & Tapper, 1996). Students apparently pay a great deal more attention to grammatical errors when they have to discover them in someone else's writing or in their own, instead of depending on the teacher to identify them. Similarly, they deal with errors more effectively in situations where they are required to revise and edit the same assignment, than in situations where only one draft on a writing assignment is required (Bosher, 1990; Hafernik, 1983; Chimombo, 1986). They also pay more attention to teachers comments and corrections when they are in composition classes that employ a multiple-draft approach to writing rather than the single draft approach (Ferris, 1995a; 1997).

In a review of some of the ESL literature about errors published from the late 1960s up until 1990, Render (1990) reports a general agreement among researchers that teacher response to errors should be selective and consistent. Consequently, researchers have been trying to validate different approaches to determining a general, yet principled, error hierarchy, which can be adapted to the specific writing products produced by individual writers and classes of students at different proficiency levels. Render (1990) acknowledges three criteria for such a hierarchy: 1) errors which are the most frequent; 2) errors which are the most severe or salient (i.e., they interfere with communication the most); and 3) errors which stigmatize the learner.

In spite of the fact that both frequency and severity have been identified as important critera for an error hierarchy, some researchers (Dordick, 1996; Santos, 1988; Sweedler-Brown, 1993) challenge the emphasis on frequency, because some of the frequent errors (e.g., such as article ommission - Sweedler-Brown, 1993) have little impact on textual meaning. Dordick (1996) tests out an approach to an error hierarchy on "naive native speakers of English" (i.e., undergraduate students), arguing that only those errors which most seriously interfere with communication with the average native speaker should be the focus of correction. According to the results of his study, lexical and verb-related errors (i.e., word usage and verb tense) interfered with communication the most. These results partially concur with earlier results attained by Santos (1988).

Santos (1988) had 178 university professors judge errors selected from two East Asian essays for their comprehensibility, irritability and acceptability. According to the results of the study, grammatical errors interfered less with communication and caused less irritability than lexical errors (word choice or word form errors). However, the grammatical errors, as well as the lexical errors, were still judged to be unacceptable. The unacceptability of all the errors in an academic setting undermines the emphasis that Santos claims for lexical errors, because the data were adjusted to remove the high volume of grammatical errors before the research participants made their judgements. However, the native-speaker target audience used by Santos (1988) seems more credible than that of Dordick (1996). It is professors, not native speaking students, who are the evaluators of ESL writing products in an academic context.

Another finding by Santos (1988) is somewhat similar to a finding by Sweedler-Brown (1993). Santos (1988) reports that older professors were more tolerant of ESL errors in general than were younger professors. Santos (1988) interprets this finding of tolerance in terms of the greater experience that older professors have with non-native students. He suggests that they are likely more tolerant of language errors in the products of all of their students and that they are more realistic in their expectations of their students. Experience with ESL writing products is a concept that is also emphasized by Sweedler-Brown (1993). She undertook research with experienced English writing instructors who were not trained to teach ESL. She found that they were more influenced by a student's proficiency in the grammatical features of English than their proficiency in the rhetorical features of the text, when they holistically graded student essays. According to information in the footnotes of her report, the research findings from her study were used to initiate a training program for non-ESL writing teachers, so that they would grade ESL student papers with knowledge of the severity of different error types and thus would not be unduly influenced by error frequency. In that context, due to a policy which was in place, (that teachers were to emphasize rhetorical correctness rather than grammatical correctness), a dual standard was established so that ESL students' writing products were corrected separately and differently from native-speaker products.

Nevertheless, Sweedler-Brown (1993) may be overgeneralizing her research results, when she assumes that the findings are relevant to other programs:

> ...sentence-level error was the only significant influence on holistic score and was, furthermore, the critical factor in pass/fail decisions in these ESL essays. It is discouraging to note that the quality of organization and paragraph development had no observable effect on the essays' holistic scores, especially because it seems reasonable to assume that similar judgements prevail in many writing programs where ESL students are placed in writing classes along with NS students and are taught and evaluated by instructors who have no formal ESL training. (p.12)

Considerably more research and carefully replicated research in different university contexts is necessary to get a broader picture of how faculty respond to the writing errors of their ESL students. It can not be assumed that the type of policy which Sweedler-Brown (1993) mentions exists in other contexts. ESL teachers and administrators may be encouraged by this report to assist in training other university and college faculty about more equitable grading approaches to ESL writing. However, other ESL professionals may believe that a dual standard is inappropriate or will not be tolerated by the broader university faculty in their context. The broader socio-political context in which ESL professionals work is not given much attention in the research, but it likely plays an important role in whether or not results from specific ESL research reports will be judged as applicable and useful.

Raimes (1991a), Chimombo (1986), and Ferris (1995b) recommend that errors should be approached systematically, on the basis of frequency and language patterns, as well as their severity. They claim that teachers need to be able to identify patterns in students errors and teach with appropriate strategies. They share strategies through anecdotal accounts from their experience with teaching error correction within the process-approach. It is not expected that all ESL teachers would use exactly the same approach to systematizing errors. The main concern (cf. Zamel, 1985) is that teachers adopt a method rather than using a haphazard approach and that the method adequately addresses the meaning loss incurred with the error (Ferris, 1995b).

Rapp (1988) and Leow (1996) are two researchers who report that the ability to recognize grammatical errors does correlate with L2 writing proficiency specifically. According to Rapp (1988), ESL students who are 'skilled' writers usually do not make incorrect changes during editing tasks, indicating that they can recognize what is right as well as what is wrong, whereas 'unskilled' ESL writers will correct on the basis of local grammaticality and often lack sensitivity to patterns of usage for grammatical structures in broader discourse settings. These results are based on a limited number of subjects and grammatical forms and require further replication. While it makes sense that grammatical knowledge would have a substantial correlation with writing, revising, and editing ability, the extent of a student's experience with the writing process is also an important variable that contributes to writing proficiency (Sasaki & Hirose, 1996; Lee, 1993).

2.2.3.6 Research on the writing process

Formal research is also being conducted to assess the general validity of process-oriented approach to writing in a second language (Raimes, 1985; Lee, 1993; Porte, 1996) and the effectiveness of peer-based revision (Riley, 1995; Adipattaranun, 1992; Connor & Asenavage, 1994). Research on the writing process is largely based on case-studies, using small numbers, which makes it difficult to generalize the results, in spite of the growing body of research (Raimes, 1991b; Krapels, 1990; Silva, 1993).

Documenting and comparing the differences between 'skilled' and 'unskilled' ESL writers is a research strategy from L1 writing research that has been transferred to the L2 writing research context (e.g., Porte, 1996; Bosher, 1990; Chenoweth, 1987; Krapels, 1990). Raimes (1985) notes that the accumulating research in this area has problems with consistency regarding the definitions for the terms "skilled" and "unskilled". Many times the researchers are comparing degrees of ability within one proficiency level (e.g., Bosher, 1990; Carrell & Conner, 1991), but the criteria for determining the proficiency level itself may vary. In spite of these limitations, some of the research findings regarding unskilled L2 writers will now be compared and contrasted with the L1 findings.

L1 writers are criticized as being unskilled revisers, when their revising is actually "editing" and they attend to correctness of form more than the development of meaning (Raimes, 1985). Although some ESL researchers have argued that unskilled ESL writers are like basic native speaker (NS) writers (cf. the review of L2 writing studies by Krapels, [1990]), Raimes (1985) suggests that unskilled ESL writers are less inhibited about making grammatical errors than basic NS writers, because, as second language students, they expect to have errors in their work. The unskilled ESL writers in her study did attend to meaning, but writing was so effortful that they did not produce more than a first draft.

Similar findings are reported by Porte (1996), regarding unskilled L2 writers in EFL settings. He found that the unskilled writers in his study did attend to meaning, but they often did not revise for meaning because of time constraints on their writing or misperceptions about the significance of content in their writing. Furthermore, he reports that when they try to make changes for meaning they sometimes fall back on literal translation from their first language, with disastrous results. Porte also found that they would incorrectly overgeneralize in their revision strategies (e.g., A student would find and correct a pronoun error, but then systematically change all of the other pronouns in the draft without checking the context.) He suggests that ESL teachers can not assume that their students know what is expected in a revision. Other researchers (Chenoweth, 1987; Chimombo, 1986; Raimes, 1985) agree with Porte that teachers need to model how to revise. They emphasize the importance of taking the time to have ESL students go back over their drafts and include the principles of revision and editing that they have learned through conferencing or their group work. Porte (1996) also emphasizes that revision needs to be evaluated for credit as part of the writing course to psychologically reinforce that it is a necessary part of improving in one's writing skills.

It is important to note that the labels 'skilled' and 'unskilled' writer do not correlate with the academic level of the ESL students or their general language proficiency scores,[4] though one might expect that they should. Lee's (1993) study describes the individual revising strategies of 5 ESL/EFL graduate students. He comments specifically on the phenomenon of "revising incurred errors" (p.237). The ESL/EFL students in his study created additional errors in their work as they attempted to revise the content of their papers or when they tried to fix something that was not actually an error. He reported that they had a limited sense of what was a natural English expression, and this limited awareness of English language use impeded their revision process. They had difficulties with identifying and conceptualizing errors, tending to recognize problems in surface terms, without reference to meaning. They often did not follow through on their own suggestions for corrections. As individual writers they made little or no use of peer sources available to them and did not own or use reference books that could help them improve their judgements during revision. He concludes that some of the ESL/EFL students in graduate programs (which require high TOEFL scores) may still be unskilled writers, particularly with respect to revision ability. He concluded that these particular students had not been taught the writing process.

According to a review by Silva (1993), which included over 20 studies comparing

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[4] General proficiency indicators like TOEFL scores are based on receptive language skills and may not adequately correlate with the students productive skills. I am aware of the TWE (the Test of Written English) and that some universities use it. However, Lee (1993) does not mention this score in the report.

L1 and L2 writing processes, a number of general differences between L1 and L2 composing were found. The composing process was obviously more difficult and less effective across the three substages of planning, transcribing and reviewing/revising for L2 writers than L1 writers. In the planning stage, researchers report that L2 writers generally did less planning because generation of ideas and formulation of the topic were very difficult and laborious. The actual integration of generated ideas into the text was lower in volume and effectiveness, as organizing in an L2 was more difficult. In the transcribing stage, L2 writers appeared to be more dependant than L1 writers upon their planning tools (outlines, prompts) and writing resources (dictionary), and demonstrated more concern and difficulty with vocabulary selection. Transcribing by L2 writers was less fluent and pauses in their work were more frequent, longer and more time consuming than those of L1 writers. L2 writers wrote slower and produced less text than in their L1. In the revision stage, researchers noted that L2 writers did less reviewing than L1 writers did: that is less rereading of and reflecting on their drafts. However, similar general patterns and strategies for revision were apparently used by both L1 and L2 writers, although L2 writers seemed to focus more on grammar (than actual spelling and mechanics), found revision more difficult and generally did more revision than L1 writers, across various stages of the process. The reviewer did not write the report using distinctions between the revising and editing process.

Another area of interest and importance in ESL process-writing research is the effectiveness of peer-revision in contrast to teachers' suggestions and corrections. Mendonca and Johnson (1994) studied the revision process based on audio-taped transcripts of the peer reviews, analysis of students' first and revised drafts and post-interviews with students. They report that the ESL students in their study found peer review helpful for making clarifications and elaborations in their text content, and that they used peer comments selectively. ESL writers paid more attention to the teacher or literature from their field than ESL peers, when it came to correcting grammar and choosing vocabulary.

Other findings by Connor and Asenavage (1994) were far less enthusiastic about the peer-revision process, claiming minimal, direct, measurable impact of peer comments upon student writing drafts. In that particular study, the researchers used analyses of vidoetapes, student writing drafts and student report forms to gather their data. They used Faigley & Witte's (1981) classification scheme to distinguish between revision and editing changes. There were two peer groups with a total of 8 students in the study. In spite of having received instruction in the distinction between revising and editing, the first group primarily made only editing or surface changes to their drafts and they made more changes as a result of teacher comments. Two members of the second group made more meaningful text-based changes and also made substantially fewer changes based on the teacher's feedback. The two most skilled revisors in the second group had already had some experience with the process approach to writing and also sought out additional help at a tutoring center. Even though the students in the second group did make a substantial number of revisions to their texts, they reported those changes as being self/other (tutor) generated, rather than as ensuing from the peers in their groups. The researchers also noted that the teacher suggested primarily surface changes to the ESL students and did not monitor the group work to ensure that the students were actually revising rather than editing. Their discussion of the results seem to suggest that it may take students a while to trust peer comments, and that in some situations both ESL students and teachers may need teaching and practice to implement the distinction between revising and editing.

Adipattaranun (1992) reports a similar result among her findings regarding some revision sessions for ESL undergraduate students, where ESL and native speaker peers interacted. The native-speakers were supposed to concentrate on the development and improvement of the ideas in the ESL students' drafts. They had been specifically instructed not to focus on grammatical errors. Adipattaranun included language difficulties in her list of variables that affect the quality and experience of writing using the process approach, and noted that:

> A number of the American students tended to concentrate on the grammatical mistakes ESL/EFL students made; they spent the entire session proof-reading the papers and correcting grammatical mistakes instead of giving constructive comments concerning the content of the papers. Many of the students commented that this kind of editorial consultation on their papers was necessary before the American students could understand them. Therefore, there was likely some value in this session even if it did not reach the level of ideas. Some of the American students simply did not want to operate at that level. But in other cases, the students acknowledged that it was necessary to go through that kind of editorial work to make the papers comprehensible. (pp. 247-48).
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> ...One constraint on the composing process faced by the participants was first language interference. Many of the students who had been in the United States for only one year, ... found themselves struggling with formulating ideas and thinking in English. They instinctively thought out their ideas in their native languages; then they translated them into English before writing them down. These participants mentioned that their American partners often did not understand what they were trying to say. The American partners often found these students' writing to be awkward, ... and difficult to understand. (p. 262).

From this report, it is apparent that grammatical and language-use errors may be so significant that they obscure communication about ideas. Since ESL teachers have been criticized for responding more to form than to content, or seeing themselves more as language teachers than writing teachers (i.e., Zamel, 1985), it is an issue to determine the language teachers than writing teachers (i.e., Zamel, 1985), it is an issue to determine the extent to which content and grammar can truly be separated in L2 writing. While it is possible in some cases that both ESL teachers and students may lack teaching and experience with the process approach, other research (Raimes, 1985; Silva, 1993; Krapels, 1990) also indicates that there are definite differences between the L1 and L2 writing processes. It can not always be assumed that the grammatical errors in ESL writing products are so superficial that they do not interfere with meaning (Adipattaranun, 1992).

2.2.3.7 Research on ESL writing products

A considerable amount of research on ESL writing products (Silva, 1993; Qi, 1994; Lee, 1993) comments on the issue of syntactic simplicity and immaturity in ESL writing when compared to native speaker writing or when the L1 writing of ESL students is comparated to their L2 writing. Syntactic simplicity refers to a lack of ability to produce complex English language structures, whereas syntactic immaturity refers to a lack of ability to use the morphosyntactic features of the language to create appropriate style for a discourse type and to provide appropriate reader orientation (Qi, 1994, p. 145, for the distinction between syntactic complexity and syntactic maturity).

Silva (1993) reviews approximately 54 reports of ESL writing products (out of 72 studies reviewed, the ratio of product to process research was 3 to 1). The results of the review are divided primarily between data on lack of syntactic complexity and problems with rhetorical structure, although a few of the studies did address syntactic maturity. Directing his concerns toward ESL teachers, Silva (1993) draws on the work of a number of researchers (approximately 28) and states:

> In general terms, L2 writing was found to be less complex, less mature and stylistically appropriate, and less consistent and academic with regard to language, style and tone.
>
> A fairly large number of more strictly linguistic differences was reported. It was found that L2 writers produced sentences that had more, but shorter, T units.[5] These sentences also contained fewer, but longer, clauses. In terms of conjunctions, they used more coordination and simple coordinate conjunctions, and less subordination and fewer subordinate conjunction openers. With regard to modification, it was claimed that L2 writers used fewer modifiers overall, more unmodified nouns and pronouns, fewer nonclausal/single word modifiers per T unit, fewer adjectives, fewer possessives, fewer prepositions and prepositional phrases, fewer definite articles, and fewer free modifiers (nonrestrictive phrasal and clausal elements). Additionally, L2 writers reportedly used more pronouns, more conjunctions, less passive voice, and more initial and fewer medial transitional devices.
>
> The use of cohesive devices was one area of lexicosemantic difference. There was

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[5] The definition of the term T unit originated with Hunt (Lim, 1982). T-unit means a "minimal terminal unit" and consists of one main clause, with or without subordinate clauses.

> evidence that L2 writers used more conjunctive ties, although [one researcher] found that they used fewer -- and fewer lexical ties, and [other researchers found that they] exhibited less variety in their use of lexical cohesion, and less control of L2 cohesion resources overall. (p. 666-67).

Silva's (1993) review also identifies L2 writing difficulties with respect to rhetorical structure generally and across argument and narrative text-types specifically (based on 20 studies), although one research report on expository text reported no differences between L1 and L2 writers on that text-type. The research reviewed also indicated that ESL students' responses to specific reading-writing tasks, such as responding to essay questions and using a background reading text, demonstrate notable deficiencies in the reading-writing interaction as well (based on 5 studies). Difficulties in achieving correct reader orientation (based on 2 studies) and appropriate tone and style (based on 8 studies) were also reported.

2.2.3.8 Research on the perspective of ESL students

Leki and Carson (1994, 1997) report that ESL students in the academic mainstream who had taken English for academic purposes (EAP) classes stated, among other concerns, that they still wanted more attention to language; that is: grammar and vocabulary. These findings appear to contradict theoretical expectations from the process-approach, that ESL writing students should focus more on the writing process and content development than grammar errors. However, Leki and Carson argue that these requests are given in the context of speed and efficiency. L2 students are aware that, in comparison to native speaking university students, they lose time as they grope for explicit expressions to convey their meaning and as they try to reach decisions about correct grammar. In textual tasks, they lack automaticity in their language processing.

Leki and Carson (1997) also report that ESL students found that writing in the academic mainstream required more text-responsible composing. Text-responsible writing means that the writer interprets and uses source texts accurately. The ESL students in the study claimed that in their EAP writing classes, the teachers were more concerned that what they had written was expressed clearly than whether or not they had interpreted and used source texts correctly. These particular ESL students were aware that they had problems with reading and the reading-writing interaction at an academic level.

Ferris (1995a) reports the reactions of 155 ESL students (in university level ESL composition courses) to teacher responses to their writing in situations where multiple-drafts were required and the revising-editing distinction was maintained in the process. The report confirms that the ESL students received and paid the greatest amount of attention to feedback on grammar, content and organization, in that order and on all drafts. The results indicated that ESL students do appreciate attention to their grammar problems but also place value on comments regarding the development of the content or improvement of the organization of their writing. After comparing her results with other recent research on teacher feedback, Ferris (1995a) concludes that, although dealing with grammar problems in ESL writing products is still important to ESL teachers, the process approach is having an increasing influence on them. The need to place priority on content and organizational development is being communicated to ESL students.

These recent reports from the student perspective reinforce earlier findings and recommendations by Raimes (1985), who stated:

> Some middle ground is called for. What the less proficient [ESL] writers need, compared with the more proficient and compared with unskilled L1 writers, is more of everything: more time; more opportunity to talk, listen, read, and write in order to marshal the vocabulary they need to make their own background accessible to them in their L2; more instruction and practise in generating, organizing and revising ideas; more attention to the rhetorical options available to them; and more emphasis on editing for linguistic form and style. Attention to process is thus necessary but not suffficent. (p. 250)

2.2.3.9 Impact of the trends and research on ESL materials and instruction

Techniques that are currently recommended for teaching students how to recognize and then correct errors depend heavily upon cooperative classroom theory. Peer-revision and group work is highly recommended as a way to encourage students to think about the organization of their text, proper thematic development, and communicating to an audience (Riley, 1995; Chimombo, 1986; Mendonca & Johnson, 1994). Bosher (1990) and Hafernik (1983) provide examples of a correction code and error analysis sheets to guide peer editing. Both of these researchers also provide general guidelines for teaching revision and editing.

A number of ESL writing researchers (Raimes, 1991a; Bosher, 1990; Hafernik, 1983; Ferris, 1995b, 1997; Johns, 1990) emphasize that it is important to maintain the distinction between revising and editing. Raimes (1991a) and Ferris (1997) recommend that a teacher NOT correct all errors on an initial draft. Instead the teacher should draw attention to a repeated grammatical error and only underline the errors in the draft, without expectation that error be corrected while the student is attending to content revisions in a second draft. Raimes claims that according to her previous research (Raimes, 1991a cites Raimes, 1988), that ESL students will make grammatical corrections as they rewrite (Ferris, 1997 also supports this finding). After a second draft has been written, then

Raimes (1991a) recommends that all grammatical errors be highlighted, and that students should be expected to correct them before handing in the final draft.

Raimes (1991a) also suggests that students be asked to explain the source of some of their errors. Storch and Tapper (1996) recommend student annotation of their own writing, as a way to communicate with teachers about revising and editing, for advanced writing students. The types of examples of ESL student feedback that these researchers report, indicate that ESL students need to be able to use meta-linguistic concepts (i.e., grammatical and conceptual terms) to discuss their errors. This type of student self-analysis assists the student in developing self-monitoring skills.

While the availability of background knowledge and inferencing ability is considered an asset in reading, it often interferes with successful revising and editing. Writers need a multi-draft context and time away from their writing in order to recognize that what they have written does not convey accurately to the reader what they intended. Teaching reading techniques for editing is also suggested by Raimes (1991a), so that ESL students begin to identify errors independently. A similar strategy is evident in the most recent editing handbooks (Fox, 1992; Lane & Lange, 1993), which sequence the exercises so that the students progress from changing errors that have been identified for them, to actually identifying the errors themselves.

Teacher-student conferencing is a technique recommended for teaching revision, particularly over written comments, for two reasons: (1) the teacher can misinterpret the writer's intent in formulating the text and end up distorting the text or making it less coherent; and (2) students often do not understand written comments and do not know how to implement them in a revision (Zamel, 1985; Riley, 1995; Norris, 1994; Ferris, 1997; Allison, 1995). Taking into consideration the research results which indicate that L2 proficiency may seriously interfere with comprensibility of the text for native-speaking peers and teachers (e.g., Adipattaranun, 1992; Zamel, 1985; Norris, 1994; Santos, 1988) and the need for an awareness of audience (e.g., Raimes, 1985; Silva, 1993), investing time in conferencing may be critical for the development of some ESL writers. In any type of conferencing situation, whether with teachers or peers, the writer has the opportunity to negotiate meaning and the problem and potential solutions can then be conceptualized clearly, so that effective revision results (Riley, 1995; Lee, 1993).

In the past two decades, language instruction has become less and less dependent upon individual textbooks. Current approaches to materials are eclectic (Swaffar, 1991; Raimes, 1988b; Grittner, 1990; Flynn, 1982). Institutions and teachers tend to operate on the basis of over-riding curricula, that draw from a variety of reading-writing textbooks, grammars, resource materials and nonprint media (i.e., videos, films, audio-tapes). Nevertheless, a few recent textbooks created for advanced ESL writing classes (published from 1987 to 1998) were reviewed to determine whether or not the changing trends and L2 writing reseach have had more impact on materials design, than was evident when Raimes reviewed textbooks in 1986. The textbooks considered were:

1) *Guidelines: A Cross-Cultural Reading/Writing Text* (Spack, 1996)
2) *Critical Reading & Writing for Advanced ESL Students* (Scull, 1987)
3) *Developing Cultural Literacy Through the Writing Process* (Palmer, et al., 1994)
4) *Challenges: A Process Approach to Academic English* (Brown, Cohen, & O'Day, 1991).
5) *The International Story: An Anthology with Guidelines for Reading and Writing about Fiction* (Spack, 1994)
6) *Reading, etc.: an integrated skills text* (Roseberry & Weinstock, 1992)
7) *Mosaics: focusing on sentences in context* (Flachmann, et al., 1998a)
8) *Mosaics: focusing on paragraphs in context* (Flachmann, et al., 1998b)

All of these texts were designed with an emphasis on the reading-writing interaction. They all include examples of professional writing as models for the students, and many of them include drafts of student writing, using them to model the revision process (Flachmann, et al., 1998a, 1998b; Spack, 1994, 1996; Scull, 1987). Some include the adult education emphasis on critical thinking, in relationship to reading and writing (e.g., Scull, 1987; Flachmann, et al., 1998b). They all include information about the process-approach to writing, although some of the texts (i.e., Scull, 1987; Spack, 1996; Brown, et al., 1991) do not maintain a strong distinction between the terms revising and editing. In comparison to some of the earlier texts reviewed in section 2.2.2.6 (i.e., Cobb, 1985; Kaplan & Shaw, 1983; Blass & Durighello, 1985), these texts are much more careful and comprehensive in their explanations about the writing process. The two *Mosaics* texts (Flachmann, et al., 1998a, 1998b) provide the most detailed version of the process, using six steps: thinking, planning, developing, organizing, drafting, revising and editing. All of the texts also include attention to academic needs, providing specific information about research, referencing, and quoting techniques. The continuing influence of contrastive rhetoric (Kaplan, 1996) and discourse theory is evident. The majority of the texts give attention to various text-types or rhetorical forms or address a range of undergraduate, academic topic areas (e.g., economics, psychology, science, anthropology). The exception is Spack (1994), which is a specialized text, teaching writing response to literary work. As well, the texts provide evidence for the continuing influence of cohesion theory (Halliday & Hasan, 1976), providing teaching sections that review cohesive devices, transitioning phrases and bridging techniques or dealing extensively with cohesive devices in grammar handbook sections at the end of the text.

In the area of grammar, the textbooks still vary considerably in their approach. Some offer block sections (i.e., mini-grammar handbooks at the end of the text) and others integrate sections of grammar with reading or writing tasks. While I have not had access to all of the earlier texts which Raimes (1986, 1988b) critiqued and I can not make precise comparisons, I would not judge these textbooks as being ad hoc in the way that they have related grammar to the reading and writing process. For example, Roseberry and Weinstock (1992) have very systematically set up pre-reading units based on: 1) arrangement of information (i.e., rhetorical structure); 2) vocabulary (with detailed attention to word structure in context); 3) signal words and phrases; and 4) sentence grammar. The readings are followed by options for writing assignments that include teaching about the process and encourage text-reponsible writing. The *Mosaics* text (Flachmann, et al., 1998a) which emphasizes sentences in context, relates grammar teaching to the revising and editing of examples of student writing used in the handbook.

If I were to criticize the attempts to improve grammar teaching in these textbooks, and in the recent editing and grammar handbooks (i.e., Lane & Lange, 1993; Fox, 1992; Pollock, revised by Eckstut, 1997; Frodesen & Eyring, 1993; Knepler, 1990), it would be primarily with regard to Galloway's (1987) sequencing criteria which indicate the need for contextually integrative and syntactically intricate tasks at higher proficiency levels (cf. section 1.1.2). While there has been some improvement in the grammar exercises, particularly with respect to practise complex verb forms for tense-aspect use in context, many of them are still largely discrete item tasks, that lack an integrative context. As well, they frequently focus on one simple grammatical form at a time, rather than challenging the student to the more intricate use of a variety of forms with sensitivity to a text-type.

2.2.3.10 Summary and Conclusions

In theory, the current ESL teaching context aims for instructional balance and recognizes that the form (linguistic structure at all levels), the writer, the content, and the reader must all be valued appropriately when teaching writing (Raimes, 1991b; Silva, 1990; Johns, 1990). The process-orientation to writing is fairly firmly established, at least in intermediate and advanced ESL writing classes, and university writing requirement courses. It likely also has had some impact on ESL intensive day classes, which have a significant writing component.

The current state of the ESL/L2 writing research suggests that there are significant differences between the L1 and L2 writing processes (e.g., Silva, 1993; Raimes, 1985) and undependable outcomes for ESL students on the evaluation of their written products in non-ESL academic settings (e.g., Santos, 1988; Morley, 1991; Sweedler-Brown, 1993). These differences and outcomes are directly linked to English language proficiency issues. Deficiencies in English grammar and vocabulary, and their effective, culture-specific usage, are an integral part of the problems that ESL students struggle with when writing.

This statement by Morley (1991)[6] seems to be applicable to many ESL students who aspire to further education in an English speaking context:

> Many of these students are students who may be able to 'survive' linguistically, but who are 'at risk' as far as any chance for real 'success' is concerned in the sophisticated uses of language required for participation in the academic community. (p.145)

The state of second language composition research is immature and has been subject to cycles of premature acceptance and rejection of differing approaches, all of which contribute to some area of the larger, more complex picture which would provide a solid theoretical basis for L2 writing (Silva, 1990). L2 writing research has drawn to a large extent on L1 writing theory (e.g., Zamel, 1985; Krapels, 1990), but a balancing trend has emerged, in that some of the research is seeking to determine how L2 writing and writing products (e.g., Raimes, 1985; Krapels, 1990; Silva, 1993) are different from their L1 counterparts. Kroll (1990) recommends replication of the best of previous case studies based on the process-approach. However, Silva (1990) recommends that further classroom research be implemented using a more balanced theoretical approach to L2 composition, rather than continuing with the diverse focuses on the individual elements of the theory.

Consequently, ESL writing teachers need to be cautious about implementing research results that claim to prove issues which in reality remain philosophically-biased and unproven. They need to determine for themselves how much a student's language proficiency level interferes with the writing process and make individualistic adjustments to the process that will benefit their learners. If an ESL student's English grammatical proficiency interferes substantially with the writing process, the teacher might suggest a mix of revising and editing strategies within each draft cycle, so that content is both clarified and elborated upon. If editing is required to make a draft comprehensible, then extra time should be given to also consider areas that require revision. For ESL students that demonstrate higher levels of grammatical proficiency while writing, it is likely more appropriate to delay attention to superficial grammatical errors until after more substantial content-based revisions have been completed.

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[6] Morely (1991) makes this statement with respect to ESL graduate students in the EAP program at the University of Michigan English Language Institute.

2.2.4 Implications for Instructional Design

Five factors were particularly salient to me with respect to any instructional/curriculum design project that attempts to address the need to re-integrate grammar instruction in a way that complements an academic, process-oriented, ESL writing class setting.

1) Grammatical exercises must be different. They must be creative rather than mechanical (Zamel, 1980) , requiring the student to process context and vocabulary in order to achieve the correct result (Hunston, Francis, & Manning, 1997; Petrovitz, 1997). Exercise choices must be contextualized in such a way that the relationship of grammatical structure to various types of rhetorical structures (text-types) becomes apparent (Carrell, 1987b; Carrell & Connor, 1991).

2) There is a need for a shared vocabulary available to both ESL teachers and students, which allows them to express the "meaning" of grammar and its usage, in addition to rules and generalizations that identify the surface forms of the language. This shared vocabulary is necessary so that revision requirement and editing problems can be conceptualized explicitly, rather than intuitively, with a focus on meaning as well as surface, grammatical expression (Lee, 1993; Zamel, 1980; Leech & Svartvik, 1994).

3) A range of tasks are needed that deal systematically with grammatical errors (editing) on the basis of their frequency and effect on communication as well as the other structurally related problems of syntactic simplicity and immaturity (revising) (Render, 1990; Lee, 1993; Silva, 1993; Qi, 1994; Allison, 1995).

4) Given the emphasis on the reading-writing interaction (e.g., Carrell, 1987b), it would be useful to have tasks which can assist the teacher in diagnosing the locus of structural problems and relational processing as

being either in the recognition (reading) or production (writing) mode for individual students with respect to text-type.

5) Materials should be developed with the 'eclectic' state of curriculum use in mind (Swaffar, 1991; Raimes, 1988b; Grittner, 1990) . They can and perhaps should be developed as specialized resources that address a specific area like structure, as long as they are developed in such a manner that they can easily be integrated in a process-oriented environment by a program planner and/or teacher.

These factors are all in agreement with the informal 'needs assessment' that grew out of my own brief experiences with the writing process and the writing products of ESL students. The literature supports my initial assessment and has greatly expanded my awareness of the need to design materials to address grammatical instruction that is more complementary to the writing process.

2.2.5 Implications for Working with Teachers in an R & D Project

The implications of this research for working with ESL teachers in testing field materials are important. Teachers as individuals may move with the swing of the theoretical pendulum or resist its influence. They may have deep commitments to the philosophy behind a particular approach to writing, even when the weaknesses of that approach have been exposed by time and research effort. With respect to the inclusion of grammatical instruction of any kind in the writing classroom, Qi (1994) notes: "Many teachers are caught in a dilemma. On the one hand, some teachers feel the need to teach grammar to students; on the other hand, they cannot help asking themselves whether grammar instruction makes a difference" (p.4). In spite of the fact that there has always been tension over the place of grammar in the writing classroom (Raimes, 1986; Grittner, 1990), the re-emphasis on balanced consideration of grammar with the other factors in writing is still fairly recent (e.g., Raimes, 1991b, 1991c; Celce-Murcia, 1991, 1992; Grittner, 1990; Silva, 1990). Therefore, as a researcher attempting to pilot materials that relate to grammatical issues from the framework of relational structure and relational processing, it was necessary that I try to assess how teachers' philosophies affect their response to the materials being piloted.

2.3 Relational Structure and Relational Processing Theory

2.3.1 Introduction

This portion of the review focuses on the specific linguistic framework that was used in the design of the materials which were piloted in this research and development project. Section 2.3.2 summarizes the linguistic background for a relationally-oriented framework for text organization. Sections 2.3.3 discusses specific issues in relational processing theory that are relevant to second language acquisition. Section 2.3.4 introduces the ten natural class categories of relational structure that provided much of the organizational frame for a large section of the student and teacher handbooks. Finally, section 2.3.5 discusses the advantages of using this framework in meeting the design factors previously set out in section 2.2.4.

2.3.2 Linguistic Background to a Relationally-Oriented Framework

The theoretical framework that I used to develop the writing resources materials in this research project is a specifically selected subset of categories from conceptual semantics and some constructs shared generally by various psycholinguistic theories of language processing. This area of linguistics is compatible with the process-oriented approach to writing because of the cognitive nature of the approach to discourse. Researchers in psycholinguistics are interested in general, universal, cognitive constraints on the comprehension and production of discourse. They are also concerned with memory, both short term and long term. The process of producing or comprehending a text includes the construction of a mental representation of text itself in short term memory and the activation of mental representations of other types of knowledge structures from long term memory. Activation of background knowledge from long term memory allows for elaboration and inferencing to gain an enriched understanding of a message. Psycholinguistic researchers (e.g., de Beaugrande, 1980), like L2 writing researchers (e.g., Carrell, 1982, 1984, 1987a, 1987b; Carrell, et al., 1989; Carrell & Connor, 1991), readily acknowledge that the written product, the code of a text, represents only a portion of what the writer constructs and intends and only a portion of what the reader reconstructs and interprets with respect to the message. Text processing theories have already had an impact on the ESL literature on reading and writing (cf., section 2.2.3.2 for references). However, before examining the impact of text processing theory on the L2 reading-writing research, it is necessary to briefly survey some of the relevant constructs provided .

2.3.2.1 Text Processing Theory in L1 Research

Important constructs in text processing are the parts of the mental representations created or accessed and the types of processing that occur. The mental representations are described as the text-surface, the text-base (world) and knowledge representations (de Beaugrande, 1980; Speelman & Kirsner, 1990). The types of processing which are involved in constructing and using these representations are usually explained in terms of contrasting endpoints on a set of four continua, which include: 1) top-down versus bottom-up processing (Libben, 1996; McCleliand & Rumelhart, 1981), 2) serial versus parallel processing (Garman, 1990; McClelland & Rumelhart, 1981; Jackendoff, 1987), 3) local versus global processing (Whelan and Menard, 1995; Hoover, 1997; Goldman & Saul, 1990), and 4) controlled versus automatic processing (Loew, 1995; Berko Gleason & Bernstein Ratner, 1998; Robinson, 1997; DeKeyser, 1997; Thurlow & van den Broek, 1997; Logan, 1997; Samuels & Flor, 1997).

The text-surface is a representation with levels of sound, word, sentence and discourse structural information that are immediately abstracted from the graphics of the text. This type of memory representation decays very quickly (Garnham, Oakhill, Ehrlich & Carreiras, 1995). The text-world or text-based representation is a representation of the meaning units (propositions) of a text, as they are organized conceptually. A text-base representation in short term memory does not decay as quickly as the text-surface, because the meaning of a text is reinforced and elaborated upon as processing continues. Knowledge representations of various types -- schemata, scripts and situation models -- include generic and text-specific information about the relationship between the events and objects described in a text and the real-world or imaginary context in which the text occurs. Generic knowledge representations are long term memory structures that are activated to help a reader construct a situation-model that provides a context for the message of a text (de Beaugrande, 1980).

The constructs for the types of representations have been derived mostly from research that attempts to explain reading comprehension (e.g., de Beaugrande, 1980; Lorch, Jr., 1989; Goldman & Saul, 1990; Goldman, Saul & Cote, 1995; Mills, Diehl, Birkmire, & Mou, 1995; Weaver III & Bryant, 1995; Hoover, 1997). However, the representations may also inform our understanding of the writing process. From the perspective of writing, the distinctions between knowledge and text-based representations and the text-surface illuminate the gap that exists between what writers are thinking about and what they organize into a text-surface and actually encode graphically. A skilled writer will create the surface structure of a text in different ways depending upon the type of background knowledge that the audience is assumed to possess. An unskilled writer may assume too little or too much of an audience resulting in a message which either insults or confuses them. The less readers or listeners knows about the topic, the more they depend upon connective devices that signal the organization of the text (Goldman & Murray, 1992).

Both the text-base representation and knowledge representations that are activated during text processing are known to be organized conceptually in terms of semantic relations. A number of current research projects in text processing indicate that a variety of relation types are being investigated. However, researchers tend to focus narrowly on a specific class of relations (e.g., spatial) or the syntactic manifestation of a relational category (e.g., conjunctions, pronouns) as it occurs in the specific text studied (*temporal relations:* Bingham, 1986; Bestgen & Vonk, 1995; *spatial relations:* Rinck, Williams, Bower & Becker, 1996; Haenggi, Kintsch, & Gernsbacher, 1995; Taylor & Tversky, 1996; Plumert, Carswell, De Vet, & Ihrig, 1995; *logical relations:* Bingham, 1986; Millis & Just, 1994; Millis, Golding, & Barker, 1995; Millis, Golding, & Barker, 1995; *thematic & coreference relations (pronominals or anaphora):* Speelman & Kirsner, 1990; Gordon & Scearce, 1995). In reading and writing, a variety of relation types must be integrated into the representations during processing of the text. Some of these relations are signalled explicitly in the graphic code of the text and others are inferred during processing. Research on text comprehension and recall (e.g., de Beaugrande, 1980; Einstein, McDaniel, Owen, & Cote, 1990; Zwaan & Brown, 1996) indicates that relational processing skills are very significant for long term retention of text content and well developed situation-models for a text.

Each of the pairs of contrasting processing types mentioned previously also provide insight into text comprehension and production. First, let us consider the top-down/bottom-up processing distinction (Libben, 1996; McClelland & Rumelhart, 1981). This distinction describes the fact that during the processing of the text-surface, its letters, words, and so on, at each level of representation the larger whole or gestalt is processed both in terms of knowledge of the distinct features of the entity and its holistic shape or form. For example, when processing English letters, we may recognize a letter as combination of linear and curved features (bottom-up) and as a unified shape (top-down). We also recognize a word as a combination of distinct letters (bottom-up) and as a complete unit (top-down, i.e., sight recognition). Whenever people are processing text, if they have both types of knowledge, they use both types of information simultaneously. In the case where one or other type of knowledge is deficient, then the lack of information will be compensated for by using one mode of processing more than the other. Top-down and bottom-up processing also occurs between levels within the text-surface representation and between representation types because we have the ability to process levels and representation types in parallel. Over time, specific models that have been developed for word recognition and text processing have been biased toward either top-down or bottom-up processing (Berko Gleason & Bernstein Ratner, 1998); however, the current state of the research generally acknowledges that both types of processing are important and that one type or another may be dominant, depending upon circumstances involved in the reading or writing.

The serial versus parallel processing distinction (Garman, 1990; McClelland & Rumelhart, 1981; Jackendoff, 1987) describes the way the different types and levels of language information in text are coordinated during processing. For example, the sounds, words and sentences of the text-surface typically must be processed in serial fashion, in the order that they are encountered or produced. Furthermore, a certain amount of serial processing usually occurs at the sound and word level before the reader begins constructing a higher level representation of sentences and overall text structure, unless the reader is already able to activate background knowledge information on the basis of contextual factors. As readers have information at one level, they begin building the next level; and then, the various levels are processed in parallel, with higher level representations helping to predict the formation of the lower levels.[7] On the basis of parallel processing, then, readers predict the coming words in a text on the basis of their current knowledge of the meaning of the text, the type of sentence structure presently under construction, and the word-shape and letter sequencing information immediately under consideration. Readers usually activate generic knowledge representations for a text-type and subject area early in the reading process, on the basis of reading the title. Then through parallel processing, those global sources of information are available to the reader when making local processing decisions.

The global/local processing distinction (de Beaugrande, 1980; Hoover, 1997; Goldman & Saul, 1990) describes the focus of processing with respect to the levels of representation of text (sound, word, phrase, sentence, paragraph, section, large scale knowledge schemata).[8] The lower levels of the representation, the sound, the word, the phrase and the sentence, are often presumed to be local or comparatively more local, whereas the paragraph, the section, and so on, are considered more global. In reality, all of the lower level linguistic representations are subsumed in many of the higher level representations. Therefore, any part of the text which actually manifests part of the large scale knowledge representations that guide the total text structure are actually global in nature. Global and local processing are carried out in parallel. As a consequence, a reader must discern whether individual words and phrases function primarily at a local level, or whether they also signal the more global properties of text, and therefore, help determine its type. A proficient writer will use linguistic cohesive devices and other text signalling devices (Lorch Jr., 1989) to assist the reader to understand the organization of the message.

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[7] This discussion is explaining only general processing techniques, not specific reading and writing strategies, that involve moving backward and forward through a text, such as those described in the L1 and L2 reading research in Goldman & Saul (1990).

[8] The terms local and global are used in Goldman & Saul (1990) with a similar general meaning, but are used with reference to the reading style. Thus they identified different types of global reader styles on the basis of different combinations of more local behaviours at specific times through out the processing of the text.

Writing researchers who describe the global and local distinction in purely structural terms, without reference to meaning and relation types, tend to be very critical of the fact that 'unskilled' writers tend to only edit, rather than revise their drafts. They make changes primarily at the local level, affecting primarily words and surface errors, focusing on form rather than content (Porte, 1996 cites Pianko, 1979; Hall, 1987; and Raimes, 1985 cites Perl, 1979; Sommers, 1980; Flower & Hayes, 1981; Heuring, 1984). To some extent this criticism is justified (Porte, 1996). However, as Faigley and Witte (1981) demonstrate through their classification of revision types, research on revising is more informative, if the analyses of the changes included the meaning component (i.e., surface changes versus text-base changes) and the relationship of specific words, phrases and clauses to text organization (i.e., micro and macro-structure in their model). Instead some writing researchers seem to assume that the organization of a text and its impact on the reader is only significantly affected if the writer makes revisions that involve changing sentence and paragraph order or significant addition of explanation or details to the content (e.g., Chenoweth, 1987). Again, while this is partially true, it underestimates how complex syntactic structures and connective devices increase textual effectiveness, and the sophisticated way in which local elements may signal global patterns. This problem will be discussed in more detail with respect to the L2 writing research (e.g., Schleppegrell, 1996; Intaraprawat & Steffensen, 1995; Allison, 1995).

The final processing distinction to be considered here is the distinction between automatic and controlled processing (Loew, 1995; Berko Gleason & Bernstein Ratner, 1998; Robinson, 1997; DeKeyser, 1997; Thurlow & van den Broek, 1997; Logan, 1997). Automatic processing is often considered to be subconscious and effortless, whereas controlled processing is conscious and usually effortful (Samuels & Flor, 1997).

Naturally, these types of processing represent extremes on a continuum. With respect to text processing, and the development of reading and writing skills, it is obviously important that some levels of the text representation become highly automatic (Samuels & Flor, 1997). For example, processing of the letter-sound correspondences that are important to word recognition and spelling, and processing of all areas of language structure relating to the sentence and below, usually become highly automatic skills for the average, literate English native speaker in the elementary grades. This automaticity of the lower levels, allows the focus of instruction to switch to the more global skills, which are understandably less automatic and may remain so. However, with much practise and with instruction regarding conventions of language use, people can become highly skilled writers (Kaplan, 1987), some of whom then produce text daily within their work context and who seem to demonstrate a high degree of automaticity in processing even for the more global skills of text organization.

Another area of theory that overlaps with text-processing is theory regarding our memory of words and how word recognition and recall takes place in isolation and within the context of a text (McClelland & Rumelhart, 1981; de Bot, Paribakht & Wesche, 1997). This is called the theory of the mental lexicon (Garman, 1990; de Bot, et al., 1997). A simple but main point underscored in theories of the mental lexicon is that our ability to recognize, recall, and produce words is dependent upon their efficient storage in and recall from long term memory on the basis of their linguistic characteristics, as well as their graphic characteristics. Linguistic characteristics refers to the semantic, syntactic (grammatical), and grapho-phonological (letter-sound) features of the words. Furthermore, there is a processing distinction for words based on their abstractness. This means that the words or word-parts which encode the conceptual relations in a text are more difficult to process than words which encode content. However, in normal literacy development, over time these words are processed more quickly than content words (Libben, 1996 cites results from timed-reading experiements from Stine, 1990) because of the frequency with which they are used. The frequency effect (Garman, 1980) outweighs the abstractness effect. Research in L1 literacy acquisition in the English language (Caswell, 1997; Vellutino, Scanlon & Tanzaman, 1994) indicates that many of these relational or function words of the language are minimally distinct in their semantic, syntactic and grapho-phonological representations. This means that they may easily be confused with each other during processing, if the reader or writer is operating under any type of stress or has underdeveloped mental representations of their forms.

2.3.2.2 Text Processing Theory in L2 Research

As was mentioned in section 2.2.3, text-processing theory began to have an impact on L2 reading-writing through research conducted by Patricia Carrell and her colleagues (Carrell 1984, 1987a, 1987b; Carson, et al., 1990; Carrell & Connor, 1991). Carrell's early approach to the issue of text-processing appeared to be very heavily focused on knowledge representations, due to her concerns about background knowledge and culture. However, as her research progressed, she and Joan Eisterhold Carson in particular, considered the specific use of conjunctions and other connectives to signal rhetorical information (Carrell, 1987b; Carrell & Connor 1991 cite Eisterhold & Carrell 1987, 1988). These considerations represent an inclusion of the text-surface and emphasize how linguistic features contribute to the building of knowledge representations. They also represent a more balanced use of text representation constructs.

Use of text-processing theory in L1 and L2 processing comparisons are demonstrated in a few current research reports (Horiba,1996; Zwann & Brown, 1996; Lee & Schallert, 1997, Goldman & Saul, 1990 - on reading skill; Whalen & Menard, 1995 - on writing skill). An important distinction between the L2 research subjects and many L1 research subjects is that an average level of linguistic and literary competence cannot be assumed in an acquisition situation. So, researchers have begun to focus on the L1 and L2 competence of the same subjects. Hypotheses that address this distinction in text-processing ability are the linguistic threshold hypothesis and the linguistic interdependence hypothesis. Zwaan and Brown (1996) summarize the competing views:

> ...According to the linguistic threshold hypothesis, a minimum level of L2 proficiency has to be attained before readers can achieve comprehension when reading an L2 text. Thus, substantial comprehension skill cannot compensate for deficient L2 processing at the lexical and syntactic levels. ...
>
> According to the linguistic interdependence hypothesis, on the other hand, L2 reading performance is largely shared with reading ability in a first language. (p. 292)

It should be mentioned that the hypotheses also have a counter-part for writing performance: L2 writers require a certain level of linguistic proficiency in order to write; and L2 writing performance is largely an extension of L1 writing skills (Sasaki & Hirose, 1996). Research investigations (Horiba,1996; Zwann & Brown, 1996; Lee & Schallert, 1997, Goldman & Saul, 1990; Whalen & Menard, 1995) report results that confirm both hypotheses for reading and writing to varying degrees. Other ESL research (e.g., Carson, et al., 1990; Carrell & Connor, 1991) indicates that both L2 proficiency level and L1 literacy skills affect L2 reading and writing relationships. However, the results vary among the language pairs being compared and it appears that reading skills transfer more readily than writing skills.

The text-processing-based research, though explained in different terminology, basically confirms previous educational research, indicating that when writing in an L2, writers devote more processing effort to creating the text-surface and achieving linguistic accuracy; with a consequent loss of attention to the more global aspects of the text and the process. However, the processing-based research assumes that this phenomenon is more of a developmental constraint (i.e., the emphasis on the threshold), whereas many educational researchers seem to judge it to be a deliberate focus of the writer that can be addressed through teaching (e.g., Chenoweth, 1987).

Whalen and Menard (1995), in particular, provide one of the most detailed models of extending text-processing constructs to the L1-L2 research. They relate types of strategic action and steps in the writing process to the levels of representation in the text-surface and the more global representations, emphasizing multiple levels of discourse processing. They relate the major writing steps of planning, evaluating and revising to three levels of discourse: pragmatic, textual, and linguistic. The pragmatic level aspects of the writing act (i.e., identifying the audience, the writer's personal or professional reasons for writing, topic choices, etc.) are considered the most global. The textual level of writing they define in terms of Halliday and Hasan's (1976) notions of textuality, which involve organizing the text-type features that correspond to the choices made at the pragmatic level, including the appropriate manifestations of coherence and cohesion. Their linguistic level refers to what other models call the text-surface, with the emphasis on sentences, punctuation, words, word-parts (morpho-syntax), and spelling.

However, in spite of their references to Halliday ans Hasan's (1976) theory, they make only very general reference to connectivity in determining levels of abstraction in planning. Their code for revision makes no use of semantic relations. In brief, Whalen and Menard's (1995) framework, while it shares some constructs that my framework of relational structure and relational processing uses, would not be adequate to design writing resource materials based on relational processing issues. The approach lacks descriptive breadth and appropriate attention to relational categories for the purposes of this specific instructional design project.

2.3.4 Relational Processing in a Second Language

A number of current research reports do demonstrate a specific focus on connectives and/or signalling devices in ESL/L2 reading (Goldman & Saul, 1990; Demel, 1990; Lubelska, 1991; Salager-Meyer, 1991; Goldman & Murray, 1992; Geva, 1992).

writing (Evensen, 1990; Allison, 1995; Intaraprawat & Steffensen, 1995; Schleppengrell, 1996) and speaking (Newton & Kennedy, 1996). The research varies in the exact terms used (e.g., conjunctives, connectors, pointers, signals, metadiscourse features) and the range of devices considered differs from article to article (e.g., titles & headers, words, phrases, specific syntactic categories). However, all the research focuses on the ability of the ESL student to either comprehend or produce the specific features of the text that identify its organization at a global level or across a variety of levels. In contrast to the general nature of Whalen and Menard's (1995) research, some of the articles in this collection of literature represent the extreme of focusing on one specific relation (e.g., because) or only one relational type (e.g., coreference). Collectively, however, these articles address a similar range of phenomena as is covered descriptively by the natural class framework of relational categories to be introduced in section 2.3.3.

The researchers also focus more on semantics and meaning in their evaluation of how these connectives are processed by ESL/L2 learners, taking into consideration the quality of their comprehension and production. In the area of text comprehension, Geva (1992) emphasizes that some logical conjunctions are ambiguous in the scope of their function. Therefore, the ability to process some logical connectives successfully when they join two sentences is not an indicator of ability to process them successfully when they join larger sections of discourse. Sentence level processing abilities do not directly translate into discourse processing ability. In the area of text production, these researchers not only pay attention to quantity, by measuring the frequency of cohesive devices or the frequency of different types of revisions, but also direct their attention to the quality of the L2 writers' use of those devices. Allison (1995), Intaraprawat and Stephensen (1995), and Schleppengrell (1996) demonstrate how ESL writers' choice of specific words and sentence-level grammatical categories do effect the global structure of the text and its rhetorical impact.

In constrast to this limited research in relational processing, a fair amount of the past ESL/L2 writing research (e.g, Porte, 1996; Silva's 1993 review cites from approximately 22 sources, see the categories used in the quotation in section 2.2.3.4.) and some of the current L1 and L2 comparative writing research (e.g., Silva, 1993; Sasaki & Hirose, 1996; Hall, 1990) has described the performance of ESL students, using the educational view of the writing process, with general process categories of planning, transcribing, revising and editing. There has been only very limited use of the constructs of the more linguistically detailed or text-processing oriented theory. Sasaki and Hirose (1996), for example, investigate five, general factors that are expected to explain L2 learners' writing products (writing strategies, L1 writing proficiency, L2 proficiency, knowledge of L2 writing, and instructional background), then propose a model based on those general factors. The majority of the educational studies have examined texts and labelled revisions made in the writing process using coding distinctions like word, phrase, sentence, text or using syntactic categories and T-units, (Silva's 1993 review cites from approximately 29 sources, see the categories used in the quotation in section 2.2.3.5.). ESL/L2 writing products have been described in terms of quantity of features in comparison to native speaker products, with little or no attention given to conceptual structure or the effect of a structure's use on meaning, in any of the products.

Therefore, on the basis of general theory in text-processing and the more specific research on relational processing in L1 and L2, I have identified specific information about relational structure and relational processing in an L2 that is useful for ESL teachers and students to know or to have access to in the writing process:

1) the basic distinction between relational and nonrelational conceptual categories in a text-based representation, with an understanding that our thoughts and ideas are structured conceptually before they are expressed through the grammar of any one language.

2) the general principles (constraints) that determine how conceptual categories relate to the grammatical categories (lexical and functional) within a language and across languages.

3) the high level of automaticity of relational processing in an L1 and the implications of that automaticity for L1 interference in L2 relational processing, when writing or speaking.

4) the characteristics that make relational words difficult to acquire in any language: a) ambiguity; b) partially overlapping spheres of usage for them within a language and between two languages; c) minimal perceptual differences in their linguistic characteristics; and d) abstractness.

5) the fact that relational concepts do not have to be expressed explicitly through linguistic connective devices because they can be inferred; however, each language has typical patterns of explicitness and

implicitness of relational expression that are preferred for the language itself and various text-types within the language.

6) an in-depth inventory of relational categories, with examples of how they are expressed through English grammatical structures.

Points one through five are addressed in the theoretical section (section 2) of the teacher and student versions of the handbook. The abridged version of the teacher handbook contains more depth and processing based information. Both the abridged teacher version and the full student version of the handbooks are contained in Appendices 2 and 3. The student version (Appendix 3) contains the inventory suggested previously in point six. Section 2.3.3 will now summarize the general framework of relation categories, explaining their relationship to the literature in conceptual semantics.

2.3.3 A Natural Class Framework for Relational Structure

2.3.3.1 Conceptual semantics

Conceptual semantics is the area of linguistic research that discusses conceptual organization, the constraints that human cognition places on the organization of ideas, and the way that conceptual structure interacts with linguistic structure. Foundational work in this area (though limited to sentence level data) has been conducted by Jackendoff (1983, 1987, 1990), who addresses semantic fields (identificational, possessive, thematic, spatial and temporal fields) and specific relations within each field. Barnwell (1980), Peck (1984), Larson (1984) and Crombie (1985)[9] deal extensively with the relations both within and between propositions (the semantic units that are roughly equivalent to the grammatical unit of a sentence). According to these researchers, semantic relations signal the 'organizational meaning' of a text and contribute to its identification as a member of a type. Thus, semantic relations are also considered basic to discourse appropriate versions of conceptual semantics.

Working from the constructs offered in conceptual semantics, the conceptual structure which makes up a text-based representation is recognized as having two major classes: relational and nonrelational concepts. Nonrelational entities are content laden. They include: objects, persons, places, events situations, actions, experiences, states, properties. These nonrelational entities are typically recognized as individual parts of a visual or mental field of organization. Relational entities are linking or connecting concepts. They join nonrelational concepts (content) into a continuous, congruent representation that has temporal, spatial, and perspective qualities. In previous research, I have drawn from the conceptual categories used by linguists Jackendoff (1983, 1987, 1990), Barnwell (1980), Larson (1984), Peck (1984) and Crombie (1985), as well as those used in pedagogical, descriptive language grammars such as Kane (1983 - English), Lederer (1969 - German) and Nunn (1988 - Greek) to establish a natural class framework for conceptual categories with an in depth focus on relational categories (Caswell, 1992, 1996).

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[9] The descriptive categories used by these sources draw upon the terminology used in Halliday and Hasan's (1976) *Cohesion Theory* and the 'communication relations' identified by other linguist-translators from SIL, who were contemporary to Halliday and Hasan, namely Beekman, Callow, and Longacre.

These conceptual categories, however, are embedded in different systems of linguistic representation, depending upon the source. Jackendoff (1983, 1987, 1990) uses a semantic counter-part to X-Bar syntax bracketing conventions in his representations because the end goal of his research is to be able to describe generalized correspondences between conceptual structure and syntactic structure. The contributions by Barnwell (1980), Larson (1984) and Crombie (1985) make use of the notion of binary discourse values (the value attached to an utterance/sentence based on the specific relationship between two propositions within it, e.g., Reason--Result), the sideways branching notational schemata typically used in Systemic Functional analyses and other notational devices, like 'arrows', that are used to signal that one part of a text is related to another part. None of these representational devices have been transferred into the present framework on the basis that they are unnecessary and inappropriate for designing materials that use extended text segments, when the linguistic theory and its representations must be subordinated to natural formatting of the text for reading purposes.

Part of my reasoning for setting up the natural class framework as I have is the importance of having a descriptive framework that is more abstract than specific words, but can still be related to specific words or word-parts. This feature is particularly important in applied linguistic settings that deal with extended text, like literacy development in an L2. By separating the descriptive categories from specific theoretical frameworks and drawing categories from multiple sources, I am able to provide a rich framework, that is organized by natural class, consistent with the constructs of text representation, and easily applicable to situations requiring the use of extended text segments.

2.3.3.2 Ten natural classes of relations

The natural class framework for relational categories acknowledges ten major natural classes of relational categories: identificational, thematic, spatial, temporal, manner, logical, psychological, co-reference, social, and nonliteral relations. Each major class has a variety of subcategories (Caswell 1992, 1996 - revised).

Definitions for each major class and examples of at least one of the subcategories for each major class will now be presented:

1. **IDENTIFICATIONAL RELATIONS:** Identificational relations create the identity of a participant or object, as it is introduce into a text world, by linking the object or person with a property or a generic category that defines it.
   Subtypes: attributive, instance_of, equivalent_to
   e.g., The light **is** yellow. IS = Identificational.attributive relation

2. **THEMATIC RELATIONS:** Thematic relations link things and persons to an action, state or experience.
   Subtypes: agentive, associative, basic, benefactive, experience (affected & reactive), goal, instrument, patient-affected, possessor, recipient, resultant, source.
   e.g., The salesman drove here **from** Ottawa. FROM = Thematic.source relation

3. **SPATIAL RELATIONS:** Spatial relations indicate the orientation of nonrelational categories (persons, objects, actions, events) in two and half dimensional space, that is typical of the perspective of human vision.
   Subtypes: path (bounded, directional, extent, route, reflexive); location (contact, attachment, proximity); distributive, containment.
   e.g., The leaves are scattered **over** the field. OVER = Spatial.distributive relation

4. **TEMPORAL RELATIONS:** Temporal relations indicate the orientation of non-relational concepts and event structures to each other in time.
   Subtypes: proximity, location (past, present, future), simultaneous, chronological, duration, discontinuous; FORM-FUNCTIONS: temporal-object; temporal-state
   e.g., **While** Joe watched TV, Sue read a book. WHILE = Temporal.simultaneous

5. **PSYCHOLOGICAL RELATIONS:** Psychological relations indicate the emotional and attitudinal orientation and the intentions of a text-producer in relationship to the content which that person is expressing. These relations inform the audience as to how the text producer expects them to relate to the message

content or how participants within the text-world are relating to it psychologically (e.g., characters in a literary narrative). The mood categories are fairly broad and may be narrowed further when used in combination with logical and manner relations.

Subtypes: emotion, attitude.

Communicative Intent: instruction, request, command, complaint, etc.

e.g., You **should** wash the sweater in cold water. SHOULD = Attitude-polite Communicative Intent: recommendation or instruction.

6. **LOGICAL RELATIONS:** Logical relations result through mental processing and assessment of the orientation of circumstances to events. They also include narrower categories about attitude and emotion which specify the psychological category.

Subtypes: abilitative, affirmative, additive, approximation, attemptive, causal, clarification, comparative, concessive, conclusive, conditional, etc.

e.g., He worked all day, **so** he was tired. SO = Logical.consequential relation

e.g., This book is just **like** the other one. LIKE = Logical.comparative relation

7. **MANNER RELATIONS:** Manner relations conveys a KIND OF ACTION, or PHASES of an action. They may be conceptually conflated with logical, spatial, or temporal relations.

Subtypes: accidental, avolitional, augmentive, basic, cessative, characteristic, completive, continuative, customary, diminuative, frequentive, habitual, etc.

e.g., He **stops** eating and looks up. STOPS = Manner.cessative - phase

8. **COREFERENCE RELATIONS:** Coreference relations are expressed by anaphora: semantically underspecified concepts that link to a full concept to maintain its existence in the text-world without repeating the exact same lexical item.

Subtypes: activity, anticipatory, demonstrative, expletive, personal, impersonal, (gender) indefinite, interrogative, relative, etc.

e.g., The ***counter*** is new. **It** was assembled yesterday. IT = Coreference.impersonal

9. **SOCIAL RELATIONS:** Social relations link individuals within networks of social hierarchy and signal differences in social status between various members of a community.

Subtypes: greetings, kinship roles, titles

e.g., *Reverend* Bradford is here to see you. REVEREND = Social.title

10. **NONLITERAL RELATIONS:** Nonliteral relations FREEZE a larger, complex conceptual constituent into a whole. Then a secondary, higher interpretation is posited for the entire unit, which can not be achieved by the literal relations that exist between the conceptual entities.

Subtypes: idiom, metaphor, metonymy, formulaic language, symbolism

e.g., Use of metonymy in political news reporting: place functions for people

"**Iraq** accepted the **U.S.** offer to meet..."

Each one of the natural classes of relations presented here represents a subsection of the handbooks that were developed as writing resource materials for ESL teachers and students. This descriptive framework and the other factors previously described were also used to develop exercises and answer keys. I will now discuss in general terms how this framework relates to the design factors determined in section 2.2.4.

2.3.5 Meeting Design Factors with the Relational Framework

In order to explain how the framework for relational structure and relational processing theory meets the design factors set out previously, I will review each factor and then explain how the proposed framework meets the requirements expressed. The first design factor states:

> Grammatical exercises must be different. They must be creative rather than mechanical, requiring the student to process context and vocabulary in order to achieve the correct result. Exercise choices must be contextualized in such a way that the relationship of grammatical structure to various types of rhetorical structures (text-types) becomes apparent.

An application of relational structure and relational processing theory allows me, as an instructional designer, to create exercises that use grammar in the context of extended text. Because the exercise design requires the student to integrate relational categories of various subtypes from across the ten natural classes, it is not possible for the student to complete the exercise without processing the text. I expect that there are patterns in the text, but there is not one specific pattern that the student can identify and then mechanically apply.

The second design factor states:

> There is a need for a shared vocabulary available to both ESL teachers and students, which allows them to express the "meaning" of grammar and its usage, in addition to rules and generalizations that identify the surface forms of the language. This shared vocabulary is necessary so that revision requirement and editing problems can be conceptualized explicitly, rather than intuitively, with a focus on meaning as well as surface, grammatical expression (Lee, 1993).

The natural class framework for relational structure provides vocabulary that expresses the meaning of grammar in categories that have validity for cross-cultural communication situations. Part of the intent of testing the student handbook is to discover how much adjusting this vocabulary requires for effective use with advanced ESL students.

The third design factor states:

> A range of tasks are needed that deal systematically with grammatical errors (editing) on the basis of their frequency and effect on communication as well as the other structurally related problems of syntactic simplicity and immaturity (revising).

The framework for relational structure provides a categorization system that allows teachers and students to systematize errors on a conceptual basis, which complements the syntactic approaches currently used. The framework is useful for editing and revising tasks, and it is capable of providing descriptive continuity for a range of different tasks.

The fourth design factor states:

> Given the emphasis on the reading-writing interaction, it would be useful to have tasks which can assist the teacher in diagnosing the locus of structural problems as being either in the recognition (reading) or production (writing) mode for individual students with respect to text-type.

Meeting the fourth design factor requires only that the theoretical framework be equally applicable for tasks the involve both comprehension (reading) and production (writing). This framework has that capacity.

Design factor number five states:

> Materials should be developed with the 'eclectic' state of curriculum use in mind. They can and perhaps should be developed as specialized resources that address a specific area like structure, as long as they are developed in such a manner that they can easily be integrated in a process-oriented environment by a program planner and/or teacher.

As was previously mentioned, text-processing theory is suited to a process-oriented writing classroom, because of the cognitive nature of the constructs and the emphasis on language processing based-skills, like reading and writing. I readily acknowledge that relational structure and relational processing theory is a specialized area of linguistic concern. It does not address all areas of writing development or the reading-writing interaction. It does, however, have considerable potential to address structural concerns in the revision and editing stages of the writing process.

Beside the points of suitability just expressed, a general knowledge of text-processing theory and specific knowledge of relational structure and relational processing theory have guided me, as a designer. This knowledge has informed me during the design process, guiding decisions on specific features of design for the various exercises and their answer keys, as well as providing a significant part of the organizational structure for the manual itself. Details concern the design and piloting of the writing resource materials are addressed in the methodology section, chapter 3.

Chapter 3: Methodology

3.1 Introduction

The educational research and development (R & D) paradigm (Borg & Gall, 1989; Gall, Borg & Gall, 1996) provides the general methodological guidelines for this research project. With the R & D model, research findings are used to design new products, programs, or procedures, which are then field-tested. In the case of product development, a preliminary version of the product is evaluated and then refined in a systematic, cyclic fashion, until it meets appropriate standards. The term formative evaluation is used to indicate that the evaluation is intended to gather information that will help the developer improve the product. However, in some cases, initial field-testing indicates that a product should not be further developed, as it has little chance of being successful.

This research was undertaken with the intention of completing a modified version of the first five steps of the ten step R & D cycle: 1) research and information collecting; 2) planning; 3) developing a preliminary form of the product; 4) preliminary field testing; and 5) main field testing (Borg & Gall, 1989, p. 784). Chapters 1 and 2 of the thesis have already covered step 1, research and information collecting. Section 3.2 describes the planning, development, preliminary field testing and modification of the ESL writing resource materials. Section 3.3 describes the steps involved in planning the main field test. Section 3.4 describes the main field test of the materials.

3.2 Development of the Materials

The development of the materials considers the following factors: 1) the background of the researcher/product developer; 2) the planning stage; 3) the development of the teacher handbook; 4) the development of the sample set of exercises; 5) the preliminary field test; 6) the modification of the materials (particularly the adjustments for the student handbook); and 7) the acknowledgement of remaining weaknesses in the materials, which were not adjusted before the field testing.

3.2.1 Background of the Researcher/Product Developer

An important part of the R&D process is the knowledge, skills, and experience brought to the process by a team of researchers and product developers. The product developer is a mediator between the literature and the product, interpreting the relevance of the literature for the development of a particular product. In this case, there has been no team. I have been both researcher and product developer. This section explains my background as the researcher/product developer, including the areas of linguistic training and research, second language learning experience, and teaching/tutoring experience.

3.2.1.1 Linguistic background

As a researcher and product developer, I bring a substantial background in linguistic theory and applied linguistics to the development of these ESL writing resource materials. I have completed a B.A.major and master's level course work with a strong foundation in the basic theoretical areas of linguistics: phonetics, phonology, syntax, conceptual semantics and discourse (text) representation. As well, I have training in applied linguistics areas such as ESL, language acquisition, computational linguistics, and applied linguistics in translation. As a consequence, I have a broad exposure to areas of applied linguistics, rather than a deep, but more narrow exposure, to the field of ESL. I am aware of both the similarities and the differences that exist between first and second language acquisition processes, and between advanced language management tasks (de Beaugrande, 1980) such as literacy development and translation.

My area of research specialization is relational structure and relational processing. Previous to this R & D project, I conducted research on relational structure and relational processing in the contexts of applied linguistics in translation (Caswell, 1992, 1996) and beginning literacy for students with language delay or learning disabilities (Caswell, 1997).

3.2.1.2 Second language learning experience

My second language learning experience beyond high school French includes two languages, German and Ancient Greek. I studied the German language by correspondence, in an immersion setting (Sprachenkolleg für studierende Ausländer, Freiburg am Breisgau, Germany), and as the minor subject area in my B.A. program. As a minor, my German study included 400 level advanced undergraduate classes involving grammar, literature, and translation, with attention to reading, writing, listening and speaking skills. This learning experience was partially facilitated by instruction from a communicative approach, using cooperative classroom techniques. I also conducted graduate level research in contrastive analysis between German and English text and I read linguistic literature in German. Ancient Greek is not a spoken language, so the four semesters of study that I completed in that language involved primarily the grammar translation method of language teaching, with emphasis on reading. Consequently, in my own second language learning experiences, I have been exposed to a variety of second language teaching methods.

3.2.1.3 Teaching experience

I was a teaching assistant (two terms) for the department of linguistics at the university of Calgary, which served undergraduate students from two tracks: one for linguistics majors and one for education students. I also was a phonology teacher for the applied linguistics program at the Canadian Institute of Linguistics and Trinity Western University (two terms), which served student translators and teachers in the TESOL program offered there. I have worked as a resource assistant in Special Education (seven years, half time), teaching beginning literacy and numeracy skills to children with language delay and language learning disabilities.

3.2.1.4 Extending linguistic knowledge to practise

Because of my linguistic training, I am able to analyze both student performance and materials, using the categories and constructs provided by various areas of linguistic theory. Because my specialization is relational structure and relational processing, where a teacher may see a range of unrelated, individual, grammatical errors, I recognize a systematic pattern of error. I am also aware of similarities in the relational processing characteristics of first language learners with language delay (or language learning disabilities) and the relational processing characteristics of second language learners with interlanguage grammars. I am able to interpret comments in the ESL writing literature regarding the effective and ineffective use of translation strategies during the L2 composing process (e.g., Hall, 1990; Lay, 1982; Porte, 1996; Adipattaranun, 1992; Connor, 1996; Friedlander, 1990; also Dr. Esther Enns, University of Calgary, personal communication, 1989-1992) from the perspective of translation theory (e.g., Nida & Taber, 1969; Larson, 1984; House & Blum-Kulka, 1986; Papegaaij & Schubert, 1988). All of these areas of language education need to draw upon linguistic theory about discourse structure and conceptual semantics. My skills in linguistic analysis shape my philosophy regarding ESL writing resource materials and my observations in the classroom setting.

While I have considerable regard for formal linguistics and the representations and constructs which are used in linguistic theories, my experiences as a student translator, a second language learner, and a teaching assistant have made me sensitive to the practical constraints which are placed upon a formal theory and limit its usefulness in various fields of application. The specialized, technical language and formal representations that linguists use to formulate theory are often judged by teachers to be impractical for application. Therefore, I am cognizant of the tension and misunderstanding that occurs between theoretical and applied linguists over the definition of elegance and simplicity for linguistic representation. What a formal linguist considers to be simple, elegant theory may be a technical and logical nightmare to a translator or educational practitioner. As an applied linguist, I believe that linguistics is vitally important to educators and that linguistic constructs and representations can be successfully adapted to be useful for educators and language students. However, successful adaptation of the theory is most likely to be achieved through cooperative efforts between applied linguists and educators. That was the reason I chose the research and development paradigm for my methodology. I am committed to learning to be a mediator between the field of linguistics and various fields of application, such as education. Mediation requires investing time in learning to understand what educators and students want and need, as well as knowing what linguistics has to offer.

3.2.2 The Planning Stage

The planning stage for materials development included the following considerations: 1) the initial conceptualization of the resource materials; 2) obtaining a commitment from an institution; and 3) establishing a time table for preliminary field testing.

3.2.2.1 Initial conceptualization of the resource materials

Initially, my ideas for the design of these writing resources included only a teacher's version of the handbook on relational processing theory. My focus was more on the exercises at first, as I considered creating exercises for three general proficiency levels: intermediate high, advanced, and advanced-plus (ACTFL Generic Guidelines, Byrnes & Canale, 1987). I had conceptualized a more generalized resource product that would address all three of these levels and thus provide materials for both remediation and enhancement. However, I had the opportunity to use a consciousness raising exercise, an outline of the relational categories, and a sample of a rational cloze option exercise, in a presentation for a masters level TESL course in the winter of 1997. The feedback that I obtained from that group of practising and potential ESL teachers (total N = 16) caused me to adjust my conceptualization of the product.

Three factors emerged from this very informal research. 1) The intermediate level[10] teachers in the TESL course were not very familiar with the vocabulary for relational structure that is foundational to the handbook. 2) The importance of being able to talk about the meaning behind grammar errors was confirmed. However, the teachers thought that some of the vocabulary of the framework (as presented) would be too difficult for intermediate students. 3) The creation of a student handbook was encouraged, as it would give students more control over their learning and the ability to initiate discussion with their teacher on the correct use of relational terms.

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[10] These teachers identified themselves as teaching at the intermediate level. This label is not the result of any attempt on my part to identify the levels of their courses according to either the ACTFL guidelines or

As a result of this information, I thought that the range of proficiency levels which could be addressed in the field testing of the materials should be reduced for pragmatic reasons. It seemed unlikely that a single version of the student handbook could be developed which would be suitable for the both the intermediate high and advanced levels. Furthermore, it would have been unwise to develop multiple versions of the work until research confirmed the usefulness of the theoretical approach from teacher and student perspectives. It also seemed advisable to try to develop materials first for the advanced levels, as this would require less vocabulary adjustment in the process of adapting concepts from the linguistic framework, when writing for a T/ESL audience.

Although it was my preference to develop the materials for advanced ESL students, it was not realistic to invest the effort in materials development until I had gained access to an institution. I identified four institutions which provided programming for adult ESL students and could potentially participate in field testing, but not all of them offered courses at the advanced levels. I needed to obtain a commitment from an institution in order to focus the development of the materials for a specific proficiency level.

3.2.2.2 Obtaining a commitment from an institution

On April 22, 1997, I met with the administrator of an ESL program which offered an extensive range of classes, including intensive classes at advanced levels for students who intended to study at university or college. At that first meeting, the administrator considered a summary of the relational structure framework and a sample exercise. After some discussion of my research goals, it was recommended that I should develop the materials for the most advanced levels offered (levels 6 and 7 in the program). We set a tentative deadline for the completion of a preliminary package of the resource materials by mid to late June. It was also determined that as the package approached completion, we would confirm another meeting date for a session where we would make definite plans for

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the Canadian Benchmarks.

approaching the teachers and students who would be involved in the piloting and field testing.

Tentative plans were discussed with respect to ethical issues. Given the understanding that research participants must volunteer, the administrator did think it was feasible to pilot my questionnaires for data gathering and some of the exercises with students from the summer session, as classes with the appropriate proficiency level were in progress The situation of the teaching staff at the institution was also discussed with regards to my research expectations. All of the ESL teachers were part time and paid by the hour, so it would not have been realistic to expect that they would be willing to commit very much unpaid time. However, the institution did have a few instructors who were filling temporary, full-time, academic assistant and curriculum development positions. The administrator was willing to allow these employees to use some of their work time to examine the materials in more depth, provided that the instructors themselves were willing to participate. The possibility of offering students a small payment for their participation in the field-testing was discussed but not deemed necessary, because at this preliminary stage of the research, I was only interested in obtaining their opinion about the materials and would not be reporting any measures of their performance. Again, recognizing the general guideline of voluntary participation, the director indicated that the students were generally willing and happy to share their opinions about materials used in the courses, if one really wanted their viewpoint.

3.2.2.3 Establishing a time table for piloting and preliminary field testing

During my first meeting with the language program administrator, a time-table for the initial stages of the research were established through discussion. Piloting of questionnaires and consent forms and the preliminary field testing of the writing resource materials were scheduled to take place during the summer of 1997. A preliminary draft of the teacher handbook and a set of sample exercises with answer keys were prepared by June 26th, 1997. A second meeting with the administrator was held upon their completion. We discussed the key features of the handbook and exercises. We also considered the range of adjustments that might be required for the theoretical section of the manual to be at an appropriate reading level for the students.

It was determined that the best possible situation for field testing the materials would likely be a level 7 class. The administrator did expect that there would need to be some simplification of the theory for the students, but that fewer adjustments to the theoretical section would be required if the material was used only in the 7th level.

However, the possibility of also using the materials in the 6th level was still being considered, depending primarily on adjustments to the handbook.

Since we had already discussed the possibility of an instructor reviewing the material in some depth, it was agreed that I should prepare a reading guide and a general letter of introduction to the research project. Then an academic assistant could be approached about reading the material and being interviewed. One of the academic assistants had just finished teaching the 7th level and was considered an excellent candidate to provide feedback and guidance for adjusting the handbook for the student's version. Tentative plans were set: 1) to approach teachers who were serving as an academic assistant or curriculum developer about an in depth review of the teacher handbook and the exercises, in mid-July; 2) to distribute an invitation to the 30 part-time teachers at the institution to participate in the research at the July 10th staff meeting; 3) to locate volunteer students from the summer class (7th level); and 4) to complete a student version of the handbook in early August, if possible.

3.2.3 Development of the Teacher Handbook

I conceptualized the general structure of the handbook as having four main sections: 1) a general introductory section; 2) a theoretical section which summarizes relational processing theory and establishes its relationship to the development of L2 reading and writing skills; 3) a descriptive section, which details the ten natural classes and subcategories of relational structure; and 4) an index.

Some consideration was given to trying to write one handbook that would serve both the teachers and the students. However, I felt that the teacher's version should include more theoretical background than the student's version, and that teachers should be encouraged to become familiar with some of the linguistic terminology in order to have access to primary literature in the area. Indeed, one of the major concerns in writing the handbooks, for both the teachers and the students, was adjusting the writing style from the technical domain of linguistics for a nonlinguistic[11] audience, which nevertheless, needs to understand linguistic concepts. Two areas where the choice of terminology were particularly important were: 1) the approach taken toward grammar or syntax; and 2) the terms used for the natural class organization of relational structure.

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[11] I do not consider all ESL teachers to be 'applied linguists'. In my estimation, an applied linguist is someone who is capable of taking constructs and theory from the primary linguistics literature and adapting them for use in materials (e.g., exercises, textbooks, tests) for specific fields (e.g., ESL, translation, speech pathology, special education) or is capable of consulting with linguistic specialists regarding areas of linguistic theory that change very rapidly. Some ESL teachers and administrators are also applied linguistics researchers but not all of them.

Since the advent of Chomsky's transformational grammar of English (Chomsky, 1957) and the emergence of the generative paradigm of linguistic research, there has been debate and tension as to which theory of grammar should be used in the second language or writing classroom. Some have questioned whether grammar should be taught in writing classes at all (Cleary & Lund, 1993; Chaika, 1993; Lundsford, 1990; Krashen, 1982, 1984, 1989). It is commonly recognized among linguists, that the philosophy and research agenda of the generative field only acknowledges the sentence as the domain of grammar. The representations used by the field are not designed to be compatible with text grammar. Text processing issues or the functional needs of applied practitioners are not considered valid constraints on the formulation of the theory (Longacre, 1983, 1996; Werth, 1984; Berry, 1996).

In the past ten years, however, there has been a renewed interest in the distinction between functional and lexical syntactic categories in the research by generative syntacticians and second language acquisition researchers (Ouhalla, 1991, 1994; Flynn & Martohardjono, 1995). I emphasized this major syntactic distinction in the teacher's version of the handbook, because it complements the major division between relational and nonrelational concepts in conceptual structure and has implications for which descriptive syntactic categories have connective prominence in a text. Although I did include a couple of tree-structure diagrams in the foot notes, the emphasis was not on the use of the generative tree-structure representations, movement rules or constraints on movement. As an applied linguist, I consider movement between deep-structure and surface structure representations a very clumsy way of dealing with syntactic issues within extended text-processing contexts, like reading and writing tasks. Rather than expecting the teachers to use the abstract categories promoted by generative syntax, I simply emphasized which descriptive syntactic categories in English would fit into the functional categorization. I employed generalizations gleaned from the research in generative syntax and extended them to textual situations when I developed the relational processing exercises, but I chose to use the more familiar descriptive categories in the handbook because I wanted it to be accessible to the teachers and students.

I agree with Zamel (1980) that it is important for teachers to use and for students to know grammatical terminology, not because of any expectation that it will improve their initial drafting in writing, but because it provides a means for teachers and students to conceptualize and talk about the revision and editing processes. However, I consider the use of syntactic categories alone to be too superficial a means for describing errors.

Consequently, this handbook was designed with a focus on relational concepts, the meaning that they bring to grammar, and their organizational role in writing. Although the format of the handbook was driven by the ten natural classes, in the third section, descriptive syntactic categories were used along with the semantic labels to indicate to ESL students the variety of ways that English syntax allows conceptual relations to be expressed.

The terms used in the natural class organization of relational structure (cf. section 2.3.3.2) are a major point of integration between the manual and the exercises. They are part of the analysis provided in answer keys for the exercises and comprise the largest section of the handbook (cf. Appendix 3). In this area both the teacher and the student handbooks needed to be the same. For this reason, I had to decide early in the process whether or not I could use the terms as I had set them out in previous writing (Caswell, 1992, 1996) or if I should simplify them. For example, Lane and Lange (1993) use terms like *time, place,* and *position.* Because I emphasize the relational nature of all these categories, my classification system uses terms like *spatial* relation, or *temporal* relation. Because I emphasize subcategories within natural classes of relations, my classification system uses terms like *simultaneous, chronological, locative* and *additive.* The difference between my classification system involves both the range and detail of the terms and the particular syntactic categories used to express them. *Spatial, temporal, chronological, locative* and *additive* are adjectives and require the processing of word endings like *-al*, and *-tive*, whereas *time, place,* and *position* are nouns and simple root words, with no additional endings. I decided to use the classification without simplification because the materials were being prepared for classroom use where some teacher support would be available, although I was not yet certain of how much emphasis to place on use of the handbooks during the initial phases of field testing. The terms were within the vocabulary range suggested by the academic orientation of the curriculum at this level. I also knew that, in many cases, I could use simpler terms that the students were familiar with for the definitions and examples, and in doing so, I would hopefully create a manual which would build upon their previous knowledge and expand their range of vocabulary for relational expressions.

Two more issues that I felt needed special attention for an ESL audience were: 1) the phenomenon of relational word ambiguity in relationship to grammatical categories; and 2) the inclusion of a textual emphasis in the presentation of the relations.

In my previous writings about the ten natural classes for relational structure and their various subcategories, I was able to present the descriptive system in about twenty pages of material, because I would give only one or two examples, and usually the most prototypical examples, of each relation. This limited introduction to the categories was feasible because of my own experience with textual analysis and the linguistic audience being addressed. However, the relationship between English words (of various syntactic categories) and relational categories is a many-to-many relationship involving a considerable amount of ambiguity. When creating the handbook for an ESL audience, I thought it was necessary to expand the range of examples provided to illustrate each relation and to place specific emphasis on the ambiguity of relational words. While I do expect that ESL teachers could eventually become quite proficient in recognizing the various manifestations of a specific relation in their students' writing, I considered it a matter of courtesy and respect for the time pressures they experience to provide more examples. I also included more examples because I knew that ESL students would need to be sensitized to the ambiguity of these simple words. They could not be expected to demonstrate the same ability to recognize alternative, English expressions of the relations as native speakers do. Expanding the ranges of examples resulted in an increase from twenty pages of material to about sixty pages in the third section of the handbook.

The final consideration in the design was to include a textual emphasis on relational structure. This was achieved by including one or more text samples at the end of each natural class section, with the relational words or word parts from that natural class highlighted in the text sample. The individual relations had all been previously introduced with sentence level examples. The text samples were intended to provide the teacher and students an opportunity to discuss how the natural class of relations contributed to the style and formation of extended text. No answer keys were prepared for these samples, as they were designed for discussion purposes, not as a test or exercise.

3.2.4 Development of the Sample Set of Exercises

For the preliminary package of materials, I set a goal of designing approximately nine to twelve exercises. This number of exercises was considered for three reasons. First, I had five exercise types that I wanted to develop and I thought that they should be developed with more than one text type or topic, if possible. Second, I wanted to provide the teachers with options, so that they would be able to choose an exercise that would complement their use of the established curriculum. Third, I wanted to develop a range of difficulty in the exercises, making some more suitable to the 6th level and some more suitable to the 7th level. It was appropriate to attempt to prepare for both classes because the administrator could not be expected to predict in advance how many sessions would be running at the advanced levels. Preparation of exercises for both classes increased the likelihood that I would gain teacher consent to use the materials in the classroom and successfully complete the main field testing stage.

The administrator also recommended that I peruse the specific reading-writing textbooks that were used in these levels, to gain a better sense of the vocabulary, topics, and text types they included. So, I obtained a copy of each of the textbooks and used them as a guide in text selection for the exercises. A general guideline for exercise length was also established: twenty minutes or less for individual student or group activity on the task, with approximately twenty minutes to half an hour of correction and discussion.

The five types of exercises, which were developed for the exercise binder, *Text Profiles in English Language Connectivity,* were: 1) the rational cloze option task; 2) the rational gap cloze task; 3) the revision task; 4) the editing task; and 5) the collocations task. The following design factors were consistent across all five of the exercises types. The texts were based on sections extracted from authentic, published texts, many of which were clearly designed for an undergraduate readership. In some cases (e.g., Exercises 5 and 6), small sections were edited out of the text to keep the length at two pages or less, yet provide a text-type sample that had good cohesive structure, with a clear beginning and conclusion. Decisions about how to modify the text to create an exercise were based on the descriptive constructs provided by the natural class framework for relational structure, and the text representation and processing theory which were previously introduced in section 2.3, or distinctions between the revision and editing stages suggested by the process approach to writing. Each exercise was headed with background information about the author, the text type and the title of the chapter or section being used. Inclusion of this type of information was intended to stimulate background knowledge about topic and text-type conventions which the student may already possess. Instructions for each task were prepared in two formats. The first format addressed the students and was a section right on the exercise. The second format addressed the teachers and was a separate section on "strategies for teaching" prepared for each exercise. These instructions included examples of how to answer each exercise. An answer key was developed for each exercise.

The rationale for the construction of each exercise type will now be explained, with the intent of providing guidelines which other teachers or instructional designers may follow should they wish create their own exercises using the same theoretical foundations. The reasoning behind selection of different text samples within the same text type will also be explained, using the argumentative type (Connor, 1987). Criticism of the use of contrastive rhetoric in ESL textbooks has been rooted in the fact that the designers create artifical, overly simplistic examples of rhetorical forms (Raimes, 1991a; 1986). In fact, authentic texts demonstrating variation within a text-type or rhetorical form are not that difficult to obtain.

3.2.4.1 The rational option cloze task

Finished versions of the rational option cloze exercise are provided in Exercises 1, 2, and 5, in Appendix 2. The rational cloze option involves framing the correct option with distractors, as demonstrated in example (3.1), an excerpt from Exercise 1. Two distractor options exist for each correct answer so that the possibility of guessing the correct answer is only 1 in 3. Brackets are placed around the options, and the options are separated with two dots, the entire frame is numbered for reference to the answer key.

(3.1) Text excerpt from Exercise 1

> **Improving Your Interpersonal Communication Skills**
>
> (For..In..As)[1] addition to developing effective listening skills, there (is..was..are)[2] other techniques (your..you..yours)[3] can use to improve your interpersonal communication effectiveness.
>
> *Clarify Your Ideas Before Communicating.* (Clarifying..Clarified..Clarifies)[4] your ideas (behind..between..before)[5] communicating means that you (shall..should..may)[6] systematically think (through..threw..into)[7] and analyze the issues, problems, (on..or..ore)[8] ideas you want to communicate. Anytime you communicate (when..toward..with)[9] a superior, a subordinate, or co-worker, (he..you..they)[10] should basically have some theme you want (to..too..as)[11] communicate.

In the rational option cloze, a fixed-ratio deletion is not imposed for two reasons: 1) fixed ratio deletion measures the statistical redundancy of the linear and graphic features of a text, rather than measuring its comprehensibility or factors specific to processing (Bensoussan, 1990); and 2) fixed ratio deletion would include the choice of words which encode nonrelational concepts as well as relational concepts (Alderson, Clapham & Wall, 1995). The general intent for this type of design is to limit and select the choices according to relational processing theory, to choose in a semi-random manner, words or word-parts which encode relational categories. The placement of options is not determined by counting words, as this does not reflect the relational processing characteristics of the language. Placement of options was based on points of connection for phrases, clauses, sentences and paragraphs or on inflectional word parts that also signal relations.

Because there are ten natural classes of relational categories, I was also deliberately trying to target the full range of natural class options when constructing the exercise.[12] Including options from the full range of natural classes means that the choices are systematic, because they are all relational, yet they are integrative because they require the student to use a variety of relations as they naturally appear in the text. This range of choice results in an exercise which is a more demanding than a grammatical exercise which only tests one item through out the text, such as choice of tense or choice of relative pronouns.

In the majority of cases across the exercises, the intent was to balance distance between choices with the processing characteristics of the text and the range of relations expressed in it. As a general guideline, I would try to place the options within a general parameter of a minimum of five words to a maximum of twelve words. This span might also be adjusted higher or lower if the fifth or twelfth item was a nonrelational item rather than a relational one. Words which have a root or stem which is nonrelational, but include a word part that was relational (i.e., verb roots, as in frame four) can be used in a relational processing exercise by framing them with options that use the same root, but incorrect endings.

To illustrate the kind of decision making involved in using relational processing theory, I will explain decisions that were involved in choosing some of the frames in example (3.1). Frame 3 begins a new clause which modifies the word *techniques*. Syntactically, the sentence could stop at *techniques* and be well-structured, although it would be less informative. The options in frame 3 are all variations on the second person, so the frame is testing the readers' processing of thematic relations only, and in particular the use of THEMATIC.agent relation as the subject of the subordinate clause. I felt comfortable introducing a frame at this juncture, even though it is fairly close to frame two. The processing requirements for attaining a correct answer are fairly local, so it is feasible to place frames closer together. A few simpler choices at the beginning of the exercise help the students to become familiar with the task and reduce their anxiety.[13]

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[12] In fact, in many text-types the designer will often end up including only nine out of the ten options. This is because social relations are not grammaticized in functional categories in English. They are not grammatically obligatory in the same sense of the kinship markers and greeting forms in other languages.

[13] I have extended the recommendations from the ACTFL guidelines on proficiency testing (Dandonoli, 1986) to exercise design. The recommendations suggest a **warm-up** (p. 82) phase which puts the candidate at ease. Then the exercise or test proceeds to the **level check** (p.82), where most of the items tested are comfortably and consistently achieved by the student, indicating a baseline of performance. The next level involves a few **probes** (p. 82) which are expected to be beyond the student's current proficiency level, indicating the ceiling of his or her ability. Finally, there is a **wind-**

In frame 4 of example (3.1), the choices are based on various forms of the verb. The intent is to discover whether or not the student knows that the verb participle (Verb base + ing), which prototypically is an ACTION marked for MANNER-progressive (or continuative) relation, may also be conceptualized as an EVENT. In which case, it will function grammatically as a noun heading a noun phrase, such as the word *clarifying* does in the phrase ***clarifying your ideas.***

The correct preposition for frame 5 of example (3.1) is *before*. It has been modelled in the paragraph header previous to the frame. Thus a student should be able to process it correctly, on the basis of parallel structure, even though only a couple of words intervene between frames 4 and 5. A judgement to place the frames closer together than a span of five words should involve some aspect of textual redundancy that the reader clearly should be able to process. Part of what a cloze exercise measures is the students' abilities to detect redundancy in the structural and semantic features of the text (Bensoussan, 1990). However, the degree of syntactic redundancy in a text may make it too simple for readers who are highly aware of the stylistic preference for use of parallel structures in English. So, within a text I also usually try to allocate frames in such a way, that at some points the reader could figure out the correct answer from a parallel structure located near by, whereas at other points the selection frame itself was repeated in parallel. In the latter situation, readers who are aware of the parallel structure are likely (though not obligated) to choose the same option twice, indicating their awareness of parallel structure, even though they may not choose the correct option. Frames 57 and 58 in example (3.2), which is taken from Exercise 5, illustrate repetition of a frame at points of parallel structure:

(3.2) Text excerpt from Exercise 5

> **...(Whose..Whether..Weather)[57] 12 or 15 million children are dying of starvation a year, (whose..whether..weather)[58] 500 or 800 million people in the world go hungry, there is an individual fate behind (ever..even..every)[59] set of figures,...**

The point is to try to moderate the extent to which the accuracy of the choice is based on confirming evidence gleaned from heavily redundant cues available in the text, rather than being based on the reader's active predictions based on competence in relational processing. I think that an exercise which requires more active prediction moves closer to a measure of word recall that is similar to the type of recall required in writing. Under such

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down (p. 82) phase, returning to the baseline level of ability. With in the rational selection framework in a option cloze design, it is possible to meet these criteria. The use of some easier distractor items in the early frames also substitutes for using an extended lead in to the task.

conditions the exercise is expected to be more difficult (Alderson, et al., 1995), but a student's score might correlate better with the student's writing ability. Research has already been conducted (e.g., Fotos, 1991; Lee, 1995; Hanania & Shikhani, 1986) regarding the suitability of cloze tests as a substitute for writing essay tests, and the results suggest that cloze tests, if properly constructed, can be effective measures of integrative language ability (Farhady & Keramati, 1996; Bachman, 1982, 1985; Jonz, 1990; Storey, 1997).

A good test of relational processing skills requires sustained processing of extended text and sustained decision making. These tasks averaged close to two pages in length and included approximately 55 to 65 probes of the relational features of the text. If the teacher wants to measure the degree of automaticity of students' processing skills, then the task should be conducted under time constraints. The time constraints recommended for the exercises in the "teaching strategies section" were based on a reading speed of approximately 200 words per minute, plus time for decisions. This is an attempt to approximate a reading speed for editing, based upon comparisons to the average, adult native speaker reading speed for English of 250 words per minute (Archibald & Libben, 1995). If the task is being used primarily as a teaching tool time constraints on task may be relaxed. However, there is another option. The teacher may alert the students when the recommended time has ended and have the students mark the point in their texts where they are. Then the students could be allowed more time to finish the task. By following that procedure, the students would have the benefit of attempting all of the task and the benefit of learning something about their processing speed.

This task has an indirect relationship to editing skills in that it requires the student to distinguish between acceptable and unacceptable items in the text. Students must be capable of recognizing unacceptable words or word formations to edit. However, it is obviously less difficult than editing their own work, because the points of potential breakdown are framed and the correct choice is available as an option. When editing their own work, they are required both to recognize errors and to generate correct options to replace the errors.

The selection of distractors for a frame is based on several other constructs from text processing to insure that the exercise is challenging and provides a potential diagnostic of a student's processing difficulties for the teacher. On the basis of the constructs used in theory of the mental lexicon, three types of distractors are established. One type of distractor is based on the letter-sound correspondences of the languages (i.e., technically identified as grapheme to phoneme correspondence rules). I call it a phonological distractor or a grapho-phonemic distractor[14] (Caswell, 1997; Clay, 1993; Garman, 1990). In some cases, the pronunciation of the word may be the same or very similar to the correct answer. In other cases the letter patterns of the words vary only minimally. Second language students may easily confuse this type of distractor with the correct choice because of their difficulty with the English sound system (e.g., *than* versus *then*) or because of attempts to maintain a fast reading speed even though they are unable to visually process minimal distinctions in the text graphics at that speed. A second type of distractor is one chosen from the same grammatical category as the correct answer (e.g., preposition, conjunction) and is a word that feasibly could fit into a local structural configuration (e.g., phrase, clause, sentence) at that point in the text. The third type of distractor is called a maximal distractor, because it is similar to the correct choice on the basis of both of the previous criteria. It can be distinguished from the correct option only on the basis of minimal semantic differences.

The section from Exercise 5, in example (3.3), demonstrates some of these design characteristics. In frame 38, the three forms are homonyms (phonological distractors), all sharing the same pronunciation, however, each word functions in a different syntactic position in a sentence.

(3.3) Text excerpt from Exercise 5

> (It..In..On)[37] 1979, according to the World Bank's estimates, (there..their..they're)[38] were about 800 million people (from..in..for)[39] this category, as already mentioned, most of (the..that..them)[40] in southern Asia and in sub-Saharan Africa. (As..An..And)[41] estimate in 1985 (could..would..wood)[42] not look much better. There (are..our..is)[43] varying forecast figures for the year 2000: (in..into..as)[44] unfavorable circumstances, there (will..would..should)[45] be a further rise from 800 to 1,000 million; (in..into..as)[46] better circumstances, the figure (must..might..will)[47] drop to about 600 million.

In frame 39 from example (3.3), the distractors are both grammatical distractors (i.e., prepositions *from* and *for*). The two distractors are also similar to each other graphically, in this case to randomize the appearance of the distractors. The effectiveness of using both a grammatical and a phonological distractor in the same frame diminishes as the student continues through the exercise, but the effectiveness can be maintained longer if the pattern of the distractors is varied through out the text. Consequently, it is not advisable to consistently use one of each type of distractor within a frame. If the phonological distractor is not effective, it can cue the student to the correct choice. The order of the options within a frame should also be varied. The phonological distractor should not always be next to the correct choice. These variations are intended to minimize the likelihood that the students will be able to use the phonological distractor to distinguish between the correct choice and a grammatical distractor, when they do not really know which of the two is correct.

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[14] Marie Clay's (1993) *Reading Recovery: A Guidebook for Teachers in Training* (3rd. edition) uses the less technical (i.e. non-linguistic) terms visual cues and letter/sound cues.

In frame 40 of example (3.3), the distractor *the* is only a phonological distractor, as it can not function syntactically at that point in the sentence. However, *that* is a maximal distractor because its visual similarity to *them* and its grammatical viability in the phrase *most of* ***that*** *in southern Asia and in sub-Saharan Africa.* This example illustrates another construct from relational processing theory which I employed in choosing the distractors: the need to maintain local and global processing in parallel throughout the text. The choice of *that* in frame 40 creates a local expression which is grammatically accurate; however, in the larger, global context, the discussion is about people, so the correct choice, which maintains simultaneous processing of the local and global levels of the text, is the word *them.* Frames 45 and 47 of example (3.3) also demonstrate the strategy of choosing distractors on the basis of the local/global processing distinction. All three of the options in each frame are correct at the sentence level. However, only the choice of *would* (frame 45) and *might* (frame 47) indicate the appropriate discourse constraint: forecasts or predictions of approximate figures in academic text should be expressed by the subjunctive forms of the modals to indicate that future events of this type (i.e., the death of millions) can not be predicted accurately or with a high degree of probability.

The best grammatical distractors require parallel processing and maintenance of the global text representation. If they do not create a grammatical or coherent sentence at the local level, then they should be based upon a local phrase or expression which a student may be familiar with (e.g., the distinction between phrasal verbs like *look at* versus *look for*). Good grammatical distractors can also be created from prepositions which have overlapping spheres of usage (cf. Appendix 3, the student handbook, section 2.5). This means that they may be substituted for each other in some contexts, but not in the context targeted in the exercise option. Example (3.4), also taken from Exercise 5, illustrates this type of distractor in frames 29 and 31. The prepositions *above* and *over* can sometimes be interchanged when they are used in a strict spatial sense. However, when reporting statistics or volume, English speakers use the expression "*over* + reference point" to indicate an unspecified amount in excess of a certain number or volume (i.e., a logical relation).

(3.4) Text excerpt from Exercise 5

> Let us recall (them..a..those)[28] round numbers: (above..over..on)[29] 500 million children and adults suffering (for..into..from)[30] chronic malnutrition, (on..over..above)[31] 800 million living in conditions of 'absolute poverty' – (such..much..as)[32] was the estimate made by World Bank experts a (fewer..few..for)[33] years ago.

A grammatical distractor can function at a different level in the syntax and still be effective because levels of syntactic processing become skewed through recursion and embedding.[15] This type of distractor is placed with the intent to expose a processing weakness in the reader. One type of processing weakness arises from an inability to distinguish between nouns and verbs because the reader tends to process only the root of the word and is not sure of the meaning of the word ending. Another closely related processing weakness is the tendency to impose too simple of a structure on the text. It is an important processing distinction to be able to ascertain whether or not a noun is subordinate to a preposition within a complex noun phrase or is the subject of a clause and is dominated by a subordinating adverb (conjunction). Such distinctions are not likely to be processed easily in the face of distractors, when the reader's productive language ability is considerably weaker than his or her receptive ability. A reader may also be confused by a grammatical distractor for an inappropriate processing level which shares the same relational natural class as the correct option. Frame 38 in example (3.5) demonstrates the potential for the possible convergence of these types of relational processing weakness and the grammatical distractor. The correct option in the frame is the preposition *in;* the grammatical distractor at the wrong level of processing is the subordinator *when.*

(3.5) Text Excerpt from Exercise 1

> Actively using empathy (when..into..in)[38] communication implies that (we..us..do)[39] try to accommodate the receiver and match (the..then..than)[40] way we encode and transmit to the individual or group and the situation.

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[15] In syntactic theory, the term *recursion* refers to the fact that types of phrase structure and clause structures can repeat themselves within a sentence. The term *embedding* refers to the fact that structures can occur in a position subordinate to each other. A *clause* which is generally considered a more global structure than a *phrase* can be subordinated to or embedded under a more local phrase structure (e.g. relative clauses subordinate to noun phrases).

The reader who confuses noun and verb forms, might confuse the word *communication* with the word form *communicating*. English does allow an expression such as *Actively using empathy* ***when*** *communicating implies that...* This might be one basis for a wrong selection. Another possibility for incorrect processing might be to fail to process both sides of the frame and to end up projecting a fragmented simple structure on a local section of the text which recognizes *communication* as the subject of a local clause *when communication implies,* rather than as the object of a preposition in the complex noun phrase *using empathy in communication.* The distractor *when* always indicates a temporal relation, and the interpretation of *in* in this context is temporal rather than spatial. As a consequence, *when* may seem like a less ambiguous expression of the correct relation, but it is not idiomatically or grammatically feasible from a global processing standpoint.

Giving this amount of detailed attention to the choice of distractors may seem impractical to some teachers or designers; however, this type of design is important for two reasons. First, these types of distractors are verified by the data from miscue analyses conducted during reading conferences with first language learners who have difficulties in reading and writing (Goodman, 1993; Vellutino, et al., 1994; Caswell, 1997; Clay, 1993). These words are the types of words that a beginning reader or writer will substitute for the correct choice when reading aloud or attempting to write. Although some of the mistakes that are made in oral reading may be due to articulation difficulties, it is still plausible that these same types of recall errors are manifested in auditory rehearsal during silent reading. In some cases, the problems may be worse because readers may attempt to scan at a higher speed in silent reading than they might attempt in oral reading. Unstable recall for relational word or word parts in reading may result in delays in establishing clear memory representations for the use of these words and the range of their functions, which in turn would result in unstable selection or recall of these words during writing.

It is also already known that children with underdeveloped grammars display a greater propensity to produce these miscues. So it would seem inappropriate not to include this kind of developmental knowledge in the design of exercises for L2 students. According to generative grammar, the effects of modularity on language learning would predict that some ESL students may have interlanguage grammars that are clearly underdeveloped in comparison to the syntactic competence of average native-speaking college or university students (cf. Bensoussan, 1990 for a comparison of EFL students to non-fluent native readers). Some of the errors that ESL students will make will be based on interference from their first language, but the state of development of their English syntactic knowledge will also affect their relational processing ability and the corresponding discourse competence that is derived from it.

Second, the purpose of this exercise is to design a task which allows the teacher (and the students) to diagnose types of relational processing problems that are occurring at the recognition level. It is highly unlikely that a student will produce accurately and consistently in writing a distinction which he or she can not process accurately at the recognition level. Although word recognition in text is easier than unassisted recall of words from memory for writing, it is not a passive type of processing either. What a reader perceives is not cued entirely from visual memory. Auditory, grammatical and conceptual types of knowledge all provide cues which a reader uses to make predictions about the text. Accurate recall of words from memory involves the activation of multiple possibilities, and clear convergence of cues or appropriate focus on distinguishing cues when selecting an option (Garman, 1990; Early & Ericson, 1993). A considerable amount of knowledge is already available about the types of miscues that occur for relational (function) words or word parts in text processing (Goodman, 1993; Vellutino, et al., 1994; Caswell, 1997; Clay, 1993). This type of exercise design draws on the existing knowledge and theory about relational word recall to choose distractors, rather than assuming that any other word is an adequate distractor. As a result, the distractors chosen in error can provide diagnostic information about a reader's use of the various cue types when processing the text. If a teacher conferences with the reader about inappropriate choices, the reader can be made more aware of the types of cues that must be coordinated to make sense of the text when reading.

3.2.4.2 The rational gap cloze task

Samples of the rational gap cloze design are Exercises 3, 4, and 6, in Appendix 2. The design of the rational gap cloze exercise for relational processing uses much of the same logic as the rational option cloze. The major difference is that specific points of relational encoding are selected for testing, but then are tested by placing a blank in the text at that point. The blank indicates a missing relation and the reader is required to produce it.

The design of a good rational cloze exercise for testing relational processing as an integrative skill also requires that the placement of the gaps or blanks target the full range of natural classes of relations that exist in the text. The placement of blanks should also consider relational options at different levels of the text representation and move back and forth between the more local and global points of processing. While it is possible to place gaps at word endings, to continue to test word parts that encode relational categories, as well as the words that do so, in these particular samples of the task, I chose to delete only words. A small sample section of Exercise 3 is presented in example (3.6):

(3.6) Text excerpt from Exercise 3

> Towns like ours, set in a sea of land, ______ (1) been described thousands of times ______ (2) dull, bleak, flat, uninteresting. ...All that I can say is -- well, ______ (3) really have to live there to know ______ (4) country. The town of my childhood ______ (5) be called bizarre, agonizingly repressive ______ (6) cruel at times, and the land in ______ (7) it grew could be called harsh in the violence of ______ (8) seasonal changes. But never merely flat or uninteresting. ______ (9) dull.

Previous research (Farhady & Keramati, 1996 review the relevant literature) in gap (or open) cloze testing indicates that the deletion rate used in a cloze design is an important factor. As the number of words in the deletion rate increases the context provided by the text surface is also increased, making the test easier (Farhady & Keramati, 1996). In the cloze literature which I surveyed, the deletion rates ranged from every 5th to every 15th word (cf. Farhady and Keramati, 1996; Hanania & Shikhani, 1986; Bachman, 1982, 1985; Jonz, 1990). Although I use a rational deletion method, which varies the number of intervening words, I made the effort to stay within the range of every 5th to 12th word.

The text length of the rational gap cloze tasks was kept comparable to the length of the rational option cloze tasks, but the recommended time allotted for them was more than twice as long. This time difference is recommended because the student has to produce options, recalling from memory without any stimulus for the choice, rather than discriminating between options and selecting an option. Because these tasks were prepared as teaching exercises, rather than tests, I attempted to provide for acceptable-word rather than an exact-word scoring format (Fotos, 1991; Bachman, 1985) by providing alternate terms in cases where it was possible. However, the level of formality of the text, its type, and stylistic features, as well as the syntactic category, were taken into consideration when recognizing a word as an acceptable substitute for the exact word.

3.2.4.3 The revision task

Exercise 7 is the one and only sample of the type of revision tasks which can be developed using relational structure as a guideline. Lee (1993) adapts Faigley and Witte's (1981) eight general strategies that are possible responses during the revision stage of the writing process: 1) addition; 2) deletion; 3) substitution; 4) reordering; 5) rewording; 6) rewriting; 7) consolidation (i.e., increasing structural complexity); and 8) distribution (i.e., decreasing structural complexity). Some of these general strategies can be carried out on text units of various sizes, others by definition imply changes in larger units. This particular sample task potentially allows for six of the eight options. Major rewriting could not be included without providing additional sources of information for the students to try to incorporate. It is not impossible to create a revision task that includes rewriting, but I think that strategy is really most effectively taught with respect to the student's own writing and a set of sources. Distribution is a strategy that responds to poorly constructed, run-on sentences, and this sample did not include that type of problem, as a matter of choice. The choice was based upon the literature which claims that ESL writing tends to lack maturity, and that the lack of maturity is often demonstrated through the simplicity of the sentence structure (Silva, 1993; Qi, 1994; Lee, 1993). However, including examples or areas of text that require the students to use a distribution strategy is another valid design option.

The original text sample was written for approximately a grade 8 - 10 readership. I deliberately simplified the text, as is demonstrated by the comparative paragraphs in examples (3.7a) and (3.7b).

(3.7a) Simplified Paragraph:

> Leo Hendrik Baekeland was born in Ghent, Belgium. He was born November 14, 1863. Baekeland found a career in chemistry. His life took paths not paved by family traditions or influences. His father worked as a shoe repairman. His mother worked as a maid. His father and his mother could not read or write.

(3.7b) Original Paragraph (highlighted and footnoted - part of Answer Key #7):

> Leo Hendrik Baekeland was born in Ghent, Belgium, **on**[1] November 14, 1863. The paths **that**[2] Baekeland **took in finding**[3] a career in chemistry were not paved by any family traditions or influences. **Neither**[4a] his father, **who**[5] worked as a shoe repairman, **nor**[4b] his mother, **who**[6] worked as a maid, could read or write.

Some of the changes I introduced into the text involved repetition of information or structural changes in the expressions. Sentences involving complex coordination and subordination were simplified. Transition markers between paragraphs were deleted. Foregrounded temporal phrases, that were used as connective lead-ins to sentences were re-positioned in a stylistically less effective manner within the sentence. Because the revision task involves reading and then active manipulation of the text, the amount of text included in the task was limited to four paragraphs. Multiple paragraphs were included to highlight issues in writing paragraph transitions. Similar exercises can be found in Pollock (1982, 1997), but they are only one paragraph in length, so they do not have the potential to teach bridging or transition devices. They also focus primarily on subordinate and coordinate conjunctions and relative pronouns. Exercise 7 also includes revisions involving the use of temporal and spatial phrases not required by the verb.

The task was designed so that it requires the student to create more complex constructions out of grammatically accurate but simplistic text by making the relations between information more explicit. In order to revise the structure of the text so that the relationship between concepts are more explicit, the student must be capable of inferring relations that are not already explicitly expressed in the text, and also be capable of choosing specific English words with the correct grammatical categories to adjust the structure correctly. I do not think it is enough to tell ESL students that they need to revise their work. They need to be shown strategies for revising that will help them to experiment with producing more complex structures, not just for the sake of using more advanced syntax (Ferris, 1994), but for the sake of establishing clearer relationships between concepts and expressing themselves more efficiently. An answer key was created linking the revisions to the handbook, so that the teacher has the possibility of modeling how to use the handbook as a resource when revising.

3.2.4.4 The editing task

Exercise 8 in Appendix 2 is the sample of an editing task. In accordance with the distinction between revising and editing which is suggested by the process approach to writing (Peregoy & Boyle, 1997), the design of the editing task focused on grammatical accuracy, correct word forms and writing mechanics, such as spelling. Examples (3.8a) and (3.8b) demonstrate the types of adjustments made to an authentic text to create the task.

Because the task requires the student to recognize errors and produce changes, the task length was limited to one fairly long paragraph, with a high error rate (45 total errors). There were between 2 to 5 errors per line of text. The syntactic maturity of the sample is intact, but the syntactic accuracy of the text has been changed to reflect a variety of types of errors that may occur in ESL students' writing.

(3.8a) Part of Student Editing Task:

1 Learning style can be define general as the way how an individual prefers to
2 learn or processing information. More especially, Lawrence (1984) indicate that term
3 *learning style* had be used by for ways: (1) cognitive style, preferred or habit patterns
4 of mental functioned or information processing; (2) attitudes or interests these
5 influence attention into learning; (3) the tendency too seek learn environments that are
6 consistent as one's cognitive style, attitudes, and interests; and (4) an tendency to
7 using certain learning tools (learning strategies) while to avoid others. ...

(3.8b) Part of Answer Key for Editing Task:

d ly in which
1 Learning style can be define^ general^ as the way ^ ~~how~~ an individual prefers to learn
specifically s the
2 or process~~ing~~ information. More ~~especially~~, Lawrence (1984) indicate^ that ^term
has been in four ual
3 *learning style* ~~had be~~ used ~~by for~~ ways: (1) cognitive style, preferred or habit ^
ing that/which
4 patterns of mental function~~ed~~ or information processing; (2) attitudes or interests ~~these~~
ing
5 influence attention in~~to~~ learning; (3) the tendency to~~o~~ seek learn^ environments that are
with
6 consistent ~~as~~ one's cognitive style, attitudes, and interests; and (4) a~~n~~ tendency to
e ing
7 us~~ing~~ certain learning tools (learning strategies) while ~~to~~ avoid^ others.

3.2.4.5 The collocations task

The example of a collocations task is Exercise 9 in Appendix 2. A collocation is a fixed arrangement of linguistic elements, usually combinations of verb plus particle, or noun or adjective plus preposition. These arrangements must be learned as a pattern because a change in the particle or preposition produces a new expression. Collocations fall under the formulaic expressions subcategory of the NONLITERAL class of relations. Nonnative speakers of English often have difficulty discerning when prepositions or particles belong to these formulaic expressions or when they are functioning to convey other literal relations.

In the exercise, collocational expressions are replaced with blanks in the paragraph.

In this sample, fifteen collocational expressions were extracted from the paragraph. Since each set involves at least two elements, blanks that belong to the same collocation are numbered with the same number. Nonordered sets of optional expressions in dictionary form are provided at the end of the paragraph. The student's task is to choose correct collocational expressions to fill the gaps in the paragraph and put the expression in the appropriate linguistic form. Example (3.9) is an excerpt taken from the answer key for Exercise 9, to demonstrate the task:

(3.9) Answered Version of Collocations Task - Exercise 9

The first ___*reason*___(1) ___*for*___ (1) continuing the analysis of cognitive style is to ______ ___*provide*___(2) students ___*with*___(2) more information that will enable them to gain ___*control*___ (3) ___*over*___(3) their own learning (Ehrman 1990).

3.2.4.6 Variation within a text-type

The 7th level curriculum places emphasis on writing a research paper in which the student must take a position and support it. This type of writing is identified as argumentative (or persuasive) text and has been one of the text-types addressed in contrastive rhetoric research (Connor, 1987; Connor, 1996; Purves, 1988). Teaching the structure of argumentation is not easy. There are different methods for analyzing a text-type that reveal different relational aspects of writing that must be mastered. The article, "Argumentative Patterns in Student Essays: Cross-Cultural Differences" (Connor, 1987), emphasizes three different analyses of organizational structure that contribute to an acceptable style of argumentation. The first type is the "Problem-Solution" structure (p. 59), which has the stages of situation, problem, solution and evaluation. The second type is the "Interactive Patterns" structure (p. 59), which views the text as movement through a series of speech acts, by asserting claims, justifying them through observations, and inducing the asserted claim from the observation. The third type of analysis is the "Direct Appeal to Audience" structure (p. 60), which includes the responding counter-arguments of a generalized hypothetical audience, the rebuttals to the counter-arguments, and then the conclusion.

In addition, there are a number of legitimate differences in types of examples or illustrations that will be considered valid support for claims or solutions to problems, when arguing a point. Some types of research support argumentation primarily through statistical evidence. Illustrations based on narratives of personal experience that establish an author's credibility with respect to the topic may also be acceptable forms of argument validation. Theory-building and philosophical argumentation often include significant emphasis on definitions of terms and constructs. The adequacy of the definition of a construct may be the entire basis for undermining a counter argument.

A cross-linguistc study of the quality of argumentative writing by Connor (1987), which compared English, Finnish, German and U.S. writers, indicates that the best rated essays used the general "Problem-Solution" structure, with the development of the problem section using the three staged flow of speech acts: claim, justification, induction. As well, the ability of the writer to include audience awareness, through presentation of and response to counter-argument, was found to account for a range of 31 to 55% of the holistic quality of the compositions.

When choosing texts of the argumentative type for these exercises, the previously mentioned characteristics of argumentative text were consciously considered. I wanted to use samples where the relational and grammatical usage, if possible, could be related to the larger organizational schemata for the text. Some, but not all writers, use the global organizational for the text-type in smaller, recursive patterns through out the text. The text in Exercise 6 (Divine Omnipotence - Rational Gap Cloze) of Appendix 2 is an excellent small scale example of the "Direct Appeal to Audience" structure. It involves repetitive cycles of argument and counter argument, and then arrival at a conclusion. Example (3.10) is an excerpt that illustrates one such cycle of argument and counter-argument.

(3.10) Text excerpt from Exercise 6

> *Omnipotence* means "power to do all, or everything." And we **are** (10) told in Scripture that "with God all things are possible." **It** (11) is common enough, in argument **with** (12) an unbeliever, to be told that God, if He existed and **were** (13) good, would do this or **that** (14); and then, if we pointed **out** (15) that the proposed action is impossible, **to** (16) be met with the retort, " **but** (17) I thought God was supposed to be **able** (18) to do anything." This raises the whole question of impossibility.

As the text progresses, the author uses definition of terms as part of the justification for the conclusion of his argument. The focus of the argument (cf. Exercise 6 in Appendix 2 for the full text) relies on a precise definition of impossibility that differentiates between intrinsic versus extrinsic impossibility. The definition is supported by a concrete, cross-culturally valid illustration, because most humans have normal vision and understand that by the nature of what vision is, one can not see around or through buildings (i.e., it is intrinsically impossible).

In contrast to the style of argumentation in Exercise 6, in Exercise 5 (All the People and their Daily Bread), the author uses approximate statistics to support his claims that declining food production and world hunger is linked to world armament, as demonstrated in example (3.11):

(3.11) Text excerpt from Exercise 5

> (When..Where..For)^{16} global food production declined (slight..slightly..slighted)^{17} a few years ago, the authorities responsible (declares..declaring..declared)^{18} that the world food situation (and..as..at)^{19} a whole was not endangered. That (made..makes..making)^{20} the dreadful figures I am (about..above..around)^{21} to set out here no better. (In..It..Its)^{22} is important to recognize the inconsistency (from..off..of)^{23} a state of affairs in (what..witch..which)^{24} the international supply situation is (compared..comparatively ..comparative)^{25} better than it used to be, (than..while..so)^{26} at the same time whole regions are stricken (bye..by..at)^{27} famine.
>
> Let us recall (them..a..those)^{28} round numbers: (above..over..on)^{29} 500 million children and adults suffering (for..into..from)^{30} chronic malnutrition, (on..over..above)^{31} 800 million living in conditions of 'absolute poverty' -- (such..much..as)^{32} was the estimate made by World Bank experts a (fewer..few..for)^{33} years ago. Their idea was to obtain points (of..from..for)^{34} reference for the large number of people (what..who..whose)^{35} are barely able to survive, owing (that..too..to)^{36} a combination of undernourishment, disease, illiteracy, high-birthrates, under-employment, and tiny incomes. (It..In..On)^{37} 1979, according to the World Bank's estimates, (there..their..they're)^{38} were about 800 million people (from..in..for)^{39} this category, as already mentioned, most of (the..that..them)^{40} in southern Asia and in sub-Saharan Africa. ...

These samples illustrate that the design included the provision of different examples for a text-type, emphasizing that alternatives are available to the writer. They demonstrate evidence of the complexity within a text-type that may be acceptable within the academic community. A journalism article that reported on the "English-only debate" in the United States was used for the rational option cloze in Exercise 2, to provide another example of a type of writing that presents an argument, but from the stance of an observer. In a similar fashion, a variety of narrative text samples were found to demonstrate the range of features within that type. Due to time constraints and the number in the set of exercise samples, not all text types were given the same treatment. Nevertheless, the package demonstrates that teaching models for the associations between English cohesive devices and rhetorical form or text-type can be developed using authentic texts that show variations within a type in a natural way.

3.2.4.7 Answer keys and pattern analysis

Answer keys for the rational option cloze and rational gap cloze tasks were designed to allow the teacher and/or the students to conduct a pattern analysis on each student's set of errors. Each answer involved a four part analysis, which indicated: the correct word; the conceptual relation expressed by the word; the syntactic category of the word; and the processing level of the error. A pattern analysis sheet was created to accompany these exercises. Answer keys that used terms from both relational structure and descriptive syntax were created to accompany the revision and editing tasks. The answer keys were created to serve as stepping stones to integrating the exercises with the handbook. I hoped that the availability of answer keys would help the teacher and the students to become familiar with the conceptual terms. The long term goal is that the teachers and students would be familiar enough with the conceptual terms to use them when discussing the students' own writing. However, I was not expecting that degree of familiarity to be achieved within a field test of the materials.

3.2.4.8 Effects of background knowledge

The effects of background knowledge (cf. Carrell, 1982, 1984, 1987a, 1987b) on this set of tasks may be both positive and negative. For the revising and editing tasks, the effect may be positive, because people normally find it easier to recognize gaps and errors in another person's work than in their own. Relations between concepts can be inferred, so writers often read into their own document what they intended to say, rather than reading what was actually written. On the other hand, for all of these exercises, lack of previous knowledge of a text-type or a topical area may result in difficulty in choosing appropriate connectives.

3.2.5 Preliminary Field Testing

A preliminary field test of the teacher handbook and the sample exercises was conducted during the summer session, as planned. Two ESL teachers and four ESL students from a 7th level class provided a formative evaluation of the materials, primarily by reviewing them. They were not used in a classroom setting. However, a couple of the students did attempt some of the exercises.

Two ESL teachers, identified here with the pseudonyms, Gregory and Madeline, indicated their willingness to review the handbook and exercises with the assistance of a reading guide. They were asked to respond to the handbook and the exercises in terms of their suitability for ESL teachers and students, and to make recommendations for the types of changes that would be required to make the handbook useable for the ESL students in level six. Gregory was interviewed on July 22nd and Madeline was interviewed on August 15th. Some of the data from their interviews were instrumental in determining what changes needed to be made to the handbook and the exercises in order for them to be ready for the main field testing in the fall. However, the majority of the data from their interviews has been combined with the data from interviews with teachers involved in the main field testing and is included in the results and discussion from the main field testing. Consequently, demographic information about these two teachers is included in Table 2 in section 3.4.3.

I visited the level 7 class after the instructor had mentioned my research to the students and found that some were willing to participate. I met with some of the students and established times to view the materials. The four ESL students who volunteered to help with the preliminary field test were: 1) a Chinese male, age 17, from Hong Kong; 2) a Japanese female, age 26 ; 3) a Korean female, age 22; and 4) a Korean male, age 25. A fifth student volunteered but did not attend the scheduled session. The first three students met with me on July 24th, 1998 for approximately one and a half hours. The fourth student met with me on July 25th for about an hour. All of these students piloted the student consent and demographic information forms by filling them out for themselves.

The Chinese male attempted Exercise 5 (rational option cloze), while the Japanese female attempted Exercise 4 (rational gap cloze). Then both students corrected the task using the answer keys and piloted the student response questionnaire by filling it out with respect to the specific exercise which each had attempted. I asked each of them to attempt the exercise for only ten minutes and then to give feedback on it. This was suitable for the rational option cloze task, but the student attempting the rational gap cloze task took about fifteen to seventeen minutes to attempt the task because she had to do more reading to establish the gist of the text before beginning to answer.

The Korean female read small sections of the teacher handbook, the beginning of the theoretical section and the TEMPORAL relations section. I noticed that she read quite slowly. She commented positively on the way that the new or unknown words in the text were defined in context. We talked about the index. She looked up the word *before* and then found it had both TEMPORAL and SPATIAL uses. She wrote out a number of comments about the handbook.

The Korean male also read small sections of the teacher handbook. I had him read the introductory section, look briefly at the overview of the relational categories and then part of the LOGICAL relations section. I noticed that he read considerably faster than the female student who had reviewed different sections on the previous day. He also spent about ten minutes reading over Exercise 7, the revision task, and he began to attempt it. However, due to time constraints, I interrupted him and showed him the answer key and we discussed the intended outcome of the revision task (i.e., identifying relations and inserting words that made them explicit, making the text more compact or efficient). He also wrote down a few of his comments about the handbook. As well, I questioned him regarding potential offensiveness of the topic in Exercise 6, as it deals with religious beliefs. He responded that the majority of Koreans would not be offended by the topic, claiming they are used to discussion about God and values. Since the majority of the students who attended the language program at the participating institution were Korean, I decided to keep Exercise 6 in the sample.

I wrote up a procedural description of the preliminary field testing and field notes regarding the sessions with both the teachers and students. I reviewed the tapes of the interviews with the teachers for comments which were relevant to modification of the teacherhandbook in order to create the student version. I also did a linguistic assessment of the errors made by the students on the exercises and met with the director of the language program to discuss the results of the preliminary field test and some of my own impressions about the initial responses.

3.2.6 Modification of the Materials

The modification of the materials focused primarily on the creation of the student handbook from the teacher version. However, concerns also emerged about the appropriateness of the level of difficulty of the rational gap cloze tasks. A brief summary of the changes made to the materials will now be presented, with some examples of the comments that stimulated the changes.

3.2.6.1 The student handbook

The ideas which were gathered on the teacher handbook provide the answers to thesis question 2a):

2a) What recommendations do teachers make regarding the presentation of the theoretical material in the handbook, with respect to creating a student version (e.g., amount of examples required; depth of theory to be included)?

A key consideration in developing the student version of the handbook was adjusting the vocabulary from the teacher version, particularly with respect to the theoretical section of the handbook. The interviews with Gregory and Madeline provided both very specific examples and general guidelines that assisted me in adjusting the handbook for the students. For example, Gregory stated:

> For students, I found that the grammar would suit the students at the 7th level; but the vocabulary, in some cases, would be intimidating for them. So, you would have to change the -- especially in the beginning phases -- the academic language. (Interview Transcript #1 - lines 175 - 180 edited)
>
> Another thing, a brief lexicon might help, if there are larger academic words, because I've found that the 7th level students can be very familiar with grammar and very good at using it, but their greatest weakness, I've found, is vocabulary. (Interview Transcript #1 - lines 197 - 201 edited)

One of the difficulties with developing materials with an appropriate vocabulary level for the 6th and 7th level students is the variation in abilities. As I discussed specific examples with Gregory, he explained:

> Well, some students would know it and some would not. That's the problem. It's impossible to say what's high at that level because students will have deficiencies in different areas of their language abilities. And there will be a few students who will have no trouble whatsoever with "simultaneous", others who have absolutely no idea what it means and will guess...and wrongly. The definition is fairly clear: Two events are occurring at the same time. This definition beside it -- if they understand that the definition is here and they can read it quickly, they should have no trouble. (Interview Transcript #1 - lines 449 - 463 - edited)

Further comments from the interview with Madeline helped to confirm that differences in the vocabulary level and the format between the theoretical section and the presentation of the relational categories by major class with definitions and examples made the latter section much more readable for the students. Madeline stated:

> ...that is certainly much easier to read (laughter). Yeah. This was no problem. Subject/verb - explanation ...very simply written. It's always easy to read. Just how you've got it organized here. I think that's good. I think, you know, that you don't have to each time figure out where you're going... (Interview Transcript #2 - lines 297, 298, 314; 424-426 edited)

However, the level of difficulty with vocabulary and readability did affect some of the introductory sections of natural class descriptions. Madeline provided a specific example that pinpointed the need to review and adjust those areas. She also stated a general caution regarding ESL students with respect to accuracy of their self-assessment of their reading ability:

> They think that their reading ability is better than it is. I am working on something now with students who are at the university here. We use a survey to the profs and to the student. And the survey comes back...about the difficulty that they have. And of course, the profs say that they have a much harder time understanding the reading than the students say. The students tend to say that reading is the least difficult skill for them, but it's not what the profs think. That was the find[ing] from our study, but numerous studies find the same thing: that there is this discrepancy between what the students say and what the professors say about their reading. (Interview Transcript #2 - lines 252 - 271 edited)

Both Gregory and Madeline agreed, however, that the two levels were similar enough to each other in their abilities, the range of individual needs, and the course requirements, so that it should be possible to create a handbook which would be useable for both classes (Interview Transcript #1 - lines 217 - 220; 694 - 706; Interview Transcript #2 - lines 144, 145; 1171, 1172).

As a result of their feedback, I systematically revised certain linguistic terminology used throughout the entire handbook, but predominantly in the theoretical section and the introductions to some of the natural class sections of the relational categories. I shortened the introduction, and edited out several parts of the theoretical section, at least for the purposes of this main field test. Then I introduced a review of English grammatical categories, organizing the descriptive categories according to their membership in either the lexical or functional classes, with definitions and examples. However, I used the same format for that part of the theoretical section as I had previously used in the write up presenting the conceptual categories, because it seemed to break down the information load of the text into more manageable parts for the reader.

My interactions with the two ESL students provided some additional insights into how to adjust the handbook. The obvious and significant difference between the reading speed of the two students who reviewed sections of the handbook made the range of ability within the level more apparent to me and confirmed that the writing needed further adjustments to be more accessible to the students. I had also thought that the ESL students would likely respond better to a handbook that was written in a form that used the second person and addressed them directly, rather than a more formal, objective, "academic" tone. This factor was confirmed and I systematically adjusted the writing to the second person.

It was recommended that I use a numbering format for the main sections and subsections, and that headers be used at the top of the page, so that the students would always know which natural class section of the book they were using, without having to find the beginning of a section. This would be valuable if they attempted to locate information by using the index rather than the table of contents, and as a result, by pass section headings. I found that developmental types of errors, showing confusion about the sphere of usage for English prepositions, were made by the student who attempted the rational option cloze task. Consequently, I introduced a brief section on this problem area into the theoretical section of the student handbook. The major portion of the presentation of the natural classes of relational categories was transferred as originally written because the reading level had been judged to be simpler by both the instructors and the students, and because of time limitations. Finally, the index itself had to be recompiled and edited because the overall adjustments to the manual resulted in changes to the page numbering.

3.2.6.2 Minor adjustments to the rational gap cloze task

During the preliminary field testing, both a teacher and a student attempted different exercises of the rational gap cloze task. Madeline attempted Exercise 3, which was developed from a narrative-descriptive text by Margaret Laurence, and a Japanese student attempted Exercise 4, which was a descriptive journalism text excerpt from *National Geographic*.

The student scored only 36% using exact word scoring and 44% using an acceptable word scoring technique. However, she had been attempting the task under a sense of time pressure, which I had not intended for that exercise during classroom use. Her performance was about a forty percent drop in accuracy compared to the other student's performance on the rational option cloze task. But it was not appropriate to compare the difference, when both tasks had not been completed by the same student.

Madeline reported generally that she had had difficulty with the exercise and was concerned that the level was too high for the students. She stated:

> Now, I actually photocopied a couple of the exercises and did them myself. And I didn't do very well on the Margaret Laurence. I didn't do very well at all. And I actually found it a difficult exercise. Again, it would have to do with how much you have these text book answers, how much you are going to insist on the original answers being right. (Interview Transcript #2: lines 493-496; 504-508)

However, she had not kept the copy of her attempt and could not give me even a general indication of her score, by either the exact word or an acceptable word scoring, when I inquired further about it. She had also completed a rational option cloze task and claimed that it was easy. However, the indication of a percentage difference in performance between the two tasks for one well-educated native speaker would not have been reliable information from which to interpret the performance difference between the ESL students.

In my general discussion of the preliminary testing with the director of the language program, we considered the problem and weighed various options for adjusting the exercise. The director had experience in both materials development and test development for ESL students. Due to the difficulty in judging the task difficulty from the performance of one student and my intent that the exercises be used as a teaching tasks rather than tests, we decided on two adjustments to the rational gap cloze tasks, and deferred changes in text reading level until after the main field testing. We also reviewed the way I had presented the instructions across all of the exercises and I made a few adjustments to attempt to make them clearer.

With regard to changes in the rational gap cloze task, the first adjustment was to allow at least a one complete sentence lead in and closure for the task, a factor which I had noticed in some gap filling tasks, but not all (cf. Lee, 1995). Some cloze test designers use about a forty word lead in, before introducing the gaps (e.g., Bachman, 1985; *English Cloze Exercises,* Garman & Hughes, 1983). The second adjustment was to review the tasks and monitor the number of words between gaps more carefully, trying to avoid any sequences with less than a five word interval. I realized that in trying to control for the redundancy of parallel structure in certain places in the texts, that in certain areas of the text the gaps had been placed too close together. These factors would not interfere with the adequacy of rational option cloze task design, because it involves only selection, but they were potentially significant factors in a rational cloze task that used gaps or blanks. When the gaps are closer together, the reader loses context and the task is more difficult. In order to adjust for these two factors, the total number of blanks in the rational gap cloze exercises were reduced somewhat. Tasks involving a minimum of fifty blanks are generally recommended to produce a reliable cloze task (Fotos, 1991), although Bachman (1985) reports that cloze tests using as few as 30 gaps have sufficient reliability. As a result, I reduced the number of blanks by about five, when adjusting the texts to provide unaltered lead-in and closure sentences. Placing fewer gaps in the tasks would have made them easier. However, it seemed more appropriate to provide a challenge than to make the tasks too simple (Alderson, 1996), because the exercises were being designed for advanced students.

3.2.7 Remaining Weakness Acknowledged

Due to time constraints there were other weaknesses in the materials which I had identified but were not corrected adequately before the main field testing. Some of the weaknesses were in the handbook and some were specific to the exercises and the teaching strategies.

In the third section of the handbooks, the category definitions and examples for the natural classes of relations were not all equally well developed or equally well written, but the greater area of concern had been to adjust the theoretical section. When writing the teacher's version, I had been attempting to write the material without the need for specific referencing and I had intended to include only a bibliography of influencing sources. The reference list and bibliography for the teacher's version were not completed when the teacher's reviewed the material and used it for the main field testing. Due to time constraints, I chose to complete the index rather than the bibliography, as I felt that the index was more important for the field testing of the materials.

The answer keys for the exercises, although they appeared very detailed, were actually somewhat cryptic and developed more for the teacher's use than the student's use. The information given addressed why the right answers were right, but, particularly for the rational option cloze tasks, did not explain why the distractors were wrong. I was also concerned that in certain areas the examples in the handbook were not developed for enough integration between the handbook and the exercises. My analysis of the contextualized uses of the relations in context revealed many interesting cases of usage that were not included in the handbook. Some were cases which might be difficult for students to identify as an instance of a particular relation, given the type of example provided in the handbook and the difficulty involved in disambiguating relational terms in a second language. However, I thought that it was necessary to get a sense of which types of distractors were effective enough to produce errors, before including explanations about the distractors. I was not certain that it was necessary to explain them all. It also would have facilitated the integration of the exercises and the handbooks to have included page numbers from the manual that fit with a particular answer. However, the student handbook would have had to be finalized earlier in order for me to be able to go through and identify the correct page numbers, in time to integrate them into the answer keys before the materials were printed for the main field testing.

I had been considering compiling a start-up lesson to help the teachers introduce the handbook. I did not prepare the lesson for two reasons. First, in my discussions with the director, it was emphasized that I needed to be very accurate and realistic about what I expected of the teachers or they might not consent to participate. The type of lesson that I was planning would likely have taken a full hour, and I was not sure that the teachers would agree to allot that much time to introducing a resource item which was not fully integrated with the curriculum. Second, many of the recommendations that I had about getting the students started with the handbook came from only one of the two teachers who had reviewed the handbook, and their positions about its usefulness were at least partially in conflict. Consequently, I thought it might be best to let the teachers introduce it in their own ways and look for confirmation of the initial recommendations and predictions that were gleaned from the preliminary field testing, rather than trying to enforce the opinion of one teacher on the teachers who took the responsibility for field testing. Furthermore, the introduction section included some information about the format of the handbook, which could be used by the teachers with or without a specific introductory lesson.

3.3 Planning for the Main Field Testing

The planning phase for the main field testing involved: 1) developing the data gathering instruments; 2) fulfilling ethical requirements; 3) ensuring reliability in data gathering; and 4) establishing a time table for the main field testing.

3.3.1 Developing the Data Gathering Instruments

Two questionnaires were developed to use as the data collection instruments that recorded the responses of the students to the materials. One questionnaire was for the exercises; the other was for the handbook. Copies of the questionnaires are provided in Appendix 4.

The questions on these forms were developed around the following criteria: 1) student perceptions of the usefulness of the materials (appropriateness, learning, meaningfulness); 2) student ability to perceive a relationship between the exercises and editing, revising or writing skills (cf. section 1.2 - subquestions for the main research question); 3) the readability of the exercises and handbook; and 4) the appearance of the exercises and the organization of the handbook. Each questionnaire had an introductory section which explained the importance of the responses for the research process.

The exercise questionnaire was designed with a set of statements to be responded to on a four point Likert-type scale: 1 = strongly disagree; 2 = disagree; 3 = agree; and 4 = strongly agree. An 'opt out' category was set apart from the scale: 5 = unable to judge. Each question was followed by a request to state reasons for the judgement expressed previously. This first questionnaire included an example of how to respond to the Likert-scale and state a reason for the response. Open ended questions about the appearance of the exercise, possible changes, and a final request for general comments were placed at the end of the questionnaire.

The handbook questionnaire begins with specific requests about the frequency of independent usage of the handbook (without the teacher's assistance) and the contexts in which the handbook was used by the student. Then statements about the handbook follow, accompanied by the same Likert-type scale and requests for reasons. No example of how to use the scale was included on this questionnaire, as it was expected that the students would already be familiar with the scale from repeated use of the exercise questionnaire by the time they had to respond the handbook questionnaire. .

Interviews were the main data gathering instrument for collecting information from the teachers. However, I also created an exercise report form and another brief report form asking them to report the steps they took to introduce the student's version of the handbook to their class. These report forms are in Appendix 4. Toward the end of the main field test, I conducted group discussions with the students from each class, based on volunteer participation. As well, I wrote up field notes to accompany the preliminary field testing with the summer students, interviews and miscellaneous communication with the teachers, and my meetings with the director.

3.3.2 Fulfilling Ethical Requirements

When conducting a research and development project, it is unrealistic to seek approval from the ethics committee(s) involved until it is clear that access to an institution has been gained. Ethical issues were discussed in my initial meetings with the administrator of the participating institution; however, the recommendation to submit a proposal for ethics reviews followed the completion of the preliminary version of the product.

The development of questionnaires, consent forms and interview guidelines immediately followed an intensive time of product development. Consent forms developed for both the teachers and the students were designed off of a common outline which indicated the general purpose of the research, the participants the right to opt out, the provision for anonymity, and release of the data for publication. In order to assure informed consent, the forms were then specialized to include specific statements of what was required in terms of participation in the research. This differentiation included recognition of the administrator's approval of work time given towards reviewing the materials and interviewing for staff in temporary full-time positions (as an academic assistant or curriculum developer), with a clear statement of the participant's voluntary involvement. The student consent form for the fall session clearly affirmed that the administrator of the program and the teachers had approved the materials for use in the classroom and had judged them to be appropriate for the program. The decision to participate in the research by providing student opinion on the materials was voluntary and did not affect the students' grades in any way. The student consent forms were piloted with ESL students in the summer to ensure that none of the vocabulary used interfered with a student's ability to give informed consent. Samples of the consent forms are included in Appendix 4.

My project proposal and my Research Ethics Review Application was submitted to the department of Educational Policy Studies on July 24, 1997. It was approved by an ethics committee from the department by August 4th. A copy of the application and the committee's approval were then forwarded to the chair of the ethics review committee for the participating institution, with a covering letter which indicated that the project already had the approval of the ESL program director. On the basis of prior approval by my home department and the program director, the chair of the ethics review committee for the participating institution approved the research without establishing a second review committee. Thus formal approval for the research was obtained from both institutions by mid-August.

3.3.3 Planning for Reliability in Data Gathering

This research involves the use of both quantitative and qualitative data gathering methods. I will explain briefly how I planned for reliability in data gathering for each type of data. The quantitative data gained in the study is based on a small number in some cases, so reports of results were intended to be descriptive. In cooperation with the field-testing teachers, I did plan, however, to have at least one exercise that all of the students completed together (Exercise 1 - Rational Cloze Option). Beyond this no further constraints were placed, because I wanted the teachers to have options and the freedom to choose exercises that fit best with their use of the institution's regular curriculum. The director of the participating institution did state, however, that the size of these classes is representative of typical classes in ESL, in spite of the fact that the numbers are small.

In order to assure reliability of the qualitative data, I provided for triangulation of different sources of opinion on the materials, and different means of data gathering. I obtained both teacher and student opinion. At certain points, I also sought out the opinion of the director and recorded it in my field notes. I gathered both written and oral feedback from the teachers and students. I was able to observe the use of one exercise in the 7th level class. Field notes were kept through out the preliminary and main field testing sessions, as well as other forms of correspondence used to communicate with the director or the teachers (i.e., letters, memos, e-mail). As well, member checks were conducted on the interview transcripts.

3.3.4 Establishing a Time Table for the Main Field Testing

The main field test was scheduled for the fall session, beginning September 15th and ending on November 21st. An overview of the events is provided in Table 1.

Students took the placement test on September 6th, and shortly thereafter I was advised regarding the amount of materials that would need to be supplied for the main field test. The general time frame for the use of the exercises was available in advance; the specific dates were gleaned from the teacher's exercise reports.

Table 1. Schedule of Events during Main Field Testing

TASK	DATE
Gain Teacher Consent	September 11th
Finalized Materials Delivered to Institution	September 24th
Gain Student Consent - Start Up in Classrooms:	
Charlene	September 29th
Bob	September 29th
Crystal	October 1st
Preparation for Group Discussions & In Class Observation	October 22nd - 28th
Review of Placement Test & Curriculum Outline	October 22nd
Pilot Handbook Questionnaire	Oct. 29th - Nov 11th
Field Testing of Exercises - Questionnaire Completion	Oct. 7th - Nov. 19th
Charlene (Level 7) Exercise 1	October 7th
Exercise 5	October 28th
Exercise 6	November 13th
Exercise 8	November 19th
Crystal (Level 6) Exercise 1	October 15th
Exercise 5	Not Reported (Oct. / Nov.)
Exercise 8	November 18th
Bob (Level 6) Exercise 1	October 22nd
Exercise 7	November 6th
Exercise 8	November 18th
Conducting Discussions & In Class Observation	
Crystal's Group (Level 6) Discussion	November 14th
Bob's Group (Level 6) Discussion	November 14th
Charlene's Group (Level 7) Discussion & Observation	November 19th
Handbook Collection - Questionnaire Completion	November 19-21st
Interviews with Field Testing Teachers	Nov. 26th, 28th, Dec. 1st

3.4 Main Field Testing of the Materials

3.4.1 The Participating Institution

The participating institution offered four sessions (Winter, Spring, Fall - 10 weeks each, Summer - 6 weeks) of an Intensive Day Program at seven levels of proficiency, for students who were already literate in their first language (compare to ACTFL guidelines in Appendix 1):

Level 1 - Novice
Levels 2 and 3 - Intermediate
Levels 4 and 5 - Advanced/Advanced-Plus
Levels 6 and 7 - Advanced-Plus/Superior

According to the promotional materials of the institution, the goal of the intensive program is to help ESL students develop the communication skills required to function both efficiently and effectively in academic, professional and social contexts.

The director of the program was an advocate of the communicative approach to language teaching, but would likely be identified with the stream of that approach which emphasizes the importance of grammatical precision to effective communication (cf. Grittner, 1990). She believed that ESL teachers need training in both education and applied linguistics and need to be comfortable teaching grammar. She was very conscientious about student placement. She sometimes counseled students personally about an appropriate course load and the culture shock of first exposure to the cold Canadian winter and dwindling daylight hours, or other factors which could inhibit student success. The students called her by first name and obviously considered her approachable. Her policy on grading was "no good-will marks" -- as this would translate into failure for ESL students when they later tried to function in the unsheltered, English speaking academic community. However, she admitted that the policy was not easy to enforce strictly. She was in the final stages of a doctoral program and had extensive experience in ESL research, in various areas, such as placement test development, and curriculum and materials development. She had a high degree of confidence in her teachers' abilities to familiarize themselves with new materials but was also very conscientious about the ethical guidelines regarding voluntary participation in research. She was available to me for consultation on various issues through out the research process and her expert advice was sincerely appreciated.

The teachers were familiar with the writing process and used various techniques to implement the stages of the process in their classes. However, the curriculum did not emphasize maintaining a strong distinction between use of the terms revising and editing.

The participating institution had developed its own criterion referenced placement test and was in the process of finalizing its validity. Placement for all seven proficiency levels was determined from the same exam, and it was not expected that all of the students would be able to complete it. The test had three parts. The first part was a reading comprehension test; the second part was a listening test; and the third part was a writing test. The sections potentially contributed 72, 40 and 60 points respectively to a maximum total score of 172 points. There was no speaking component to the test. Benchmarks for the seven levels were established on the basis of set ranges. To be placed at the 6th level, a student had to achieve between 115 - 131 points. To be placed at the 7th level, a student had to score 132 or more points. Students who had entered the program at a lower level could proceed to the next level after passing the final exam for his or her current level, without re-taking the placement test.

Once students were placed in a level, the teacher had the first three days in which to confirm that placement was accurate. If the placement was not accurate, they could move students up or down a level. Each level encompassed a range of ability and enrollment for specific classes was on a first-come-first-serve basis. This meant that no measures were taken to organize the classes with a comparable, curved distribution of student proficiency. It was possible that one class might contain students mostly at the top end or bottom end of the range or that a class might lack students the middle section of the range for that level.

Through an extensive, formal needs assessment process, the participating institution had established that 68% of its students chose the program because they needed to improve their academic English skills. They established an overarching curriculum for the seven instructional levels offered, with descriptions of goals and objectives for each level that specified general reading, writing, speaking and listening skills and task specific enabling skills within each modality. For example, a general reading skill listed was "determining the main idea." A task specific enabling skill for reading periodicals was "the ability to read charts and graphs." The curriculum guidelines for the 6th and 7th levels were organized around academic, business and social communication, with a heavy emphasis on academic reading and writing at the 7th level. Specific resources were assigned for each level, but the teachers had considerable freedom to organize their individual class sessions and to choose from the established resources, providing they met the objectives of the overarching curriculum.

The intensive day classes were offered in two four hour time slots, either from 8:00 a.m. to noon or 12:30 to 4:30 p.m. The required texts for the 6th level were *Critical Reading and Writing for Advanced ESL Students* and the novel *Zero Avenue*. They also worked with class sets provided by the institution: *Learn to Listen; Listen to Learn* and *A 20th Century Anthology.* The required texts for the 7th level were *Guidelines (2nd edition)* and the novel, *The Stone Angel.* Further class sets provided by the institution were *Academic Mini-Lectures, A 20th Century Anthology,* and *Interviews - Units 6-10.*

3.4.2 Gaining Teacher and Student Consent

The results of the fall enrollment and placement test resulted in two 6th level classes and one 7th level class. Three teachers and forty-seven students were approached to participate in the main field test.

I had a meeting with the potential teachers, Charlene, Crystal and Bob, along with the director, after their regular staff meeting on September 11th. I introduced them to the teacher handbook, provided a letter of introduction to the research and the teacher consent forms. All three teachers agreed to participate.

Arrangements were made with each of the teachers for me to come into their classes in order to introduce the research project to the students. They wanted me to be available to answer any questions students might have or clarify any unanticipated comprehension problems that might occur with using the consent forms with a larger group of students. Of the 47 ESL students who were potential student participants for the field testing, two returned no response forms; so the sample was based on the 45 participants who consented to participate and returned one or more response forms on the exercises and handbook. Crystal, instructor 1 at the 6th level, had a total of 16 students and 15 participants. Bob, instructor 2 at the 6th level, had a total of 18 students and 17 participants. Charlene, instructor at the 7th level, had a total of 13 students and 13 participants. Eleven participants from the 7th level and 8 participants from the 6th level provided additional data through group discussions.

3.4.3 Demographic Information about the Participants

3.4.3.1 The teachers

Demographic information about the teachers who participated in the research is presented in Table 2 and includes: their formal training, teaching experience, the ESL levels taught at the participating institution, number of sessions taught at each level, and their

Table 2. Demographic Information on ESL Teachers

(Pseudo) NAME	ENGLISH 1st LANGUAGE	FORMAL TRAINING	TEACHING EXPERIENCE	LEVELS taught	No. of SESSIONS	INTERACTION with MATERIALS
Madeline	yes	B.A. Western Humanities Teaching Certificate TESL Certificate M.Ed. Language Arts	(in ESL) - Jr. High - 2 yrs. - University ESL dept. - 7 yrs. - participating institution - 11 yrs.	1 2 4 5 7	2 1 2 2 2	Curriculum Developer for piloting institution. Reviewer: - theory - 3 hrs. - exercises -1 hr.
Gregory	yes	B.A. M.A. Compative Literature & Literary Theory Ed. Diploma - ESL for Adults	- participating institution - about 6 yrs. - various other ESL contractors	1 2 3 5 7	4 3 2 1 2	Reviewer: - theory - 2 hrs. - exercises - 2hrs.
Charlene	yes (minimal French & Spanish as other languages)	B.Sc. P.D.A.D. Education Diploma in TESL MA. TESL - current program	- approximately 10 years total: - private tutoring - nongovernment organizations - participating institution	3 4 7	4 2 3	Field Testing Teacher: - 7th level
Bob	yes	B.Ed. with general science major and English minor	- Public School system (Jr. & Sr. High) - 1 yr. - participating institution - 6yrs.	1 2 4 5 6	4 3 5 5 4	Field Testing Teacher: - 6th level
Crystal	yes (a little French)	B.A. Psychology B.Ed. ESL Diploma (1yr. after degree)	- Special Education in elementary and high school - 3 yrs. - Substituting: all levels including ESL - 2yrs. - Adult ESL - approx. 3 yrs.	2 4 5	3 2 2	Field Testing Teacher: - 1st time at 6th level

interaction with the resource materials as either a reviewer or a main field testing teacher. All of the teachers involved were native speakers of English, were highly qualified and had considerable teaching experience and experience with the total program offered at the participating institution.

3.4.3.2 The students

The age of the ESL student participants ranged from 18 to 35 years old, with the average age being 25 years old. The gender distribution of the sample was 40% male and 60% female. The educational background of the students ranged from completion of high school through to completion of graduate degrees (cf. Table 3). The majority of the students (62%) had either completed an undergraduate degree or were in the process of completing one. The students reported a range of faculties and technical qualifications when indicating their major areas of study. For example, business administration, accounting, architecture, agriculture, Spanish, French, English, statistics, history, developmental psychology, and industrial chemistry were listed as degree qualifications. Other areas of training included engineering food industries, hotel management, computer operating, and so on.

Table 3. Educational Background of ESL Participants

Level	Description	N	% of Group
1	High School	5	11
2	College/Technical	5	11
3	University Undergrad	28	62
4	Multiple Undergrad	2	4
5	Graduate Studies	4	9
6	(No data)	1	2
	Total	45	99*

* Due to rounding the total is less than 100%.

The ESL students came from a variety of first languages (cf. Table 4), with 72% of the group speaking an East Asian language as their mother tongue. The largest 1st language group was Korean at 56% of the sample and the second largest group was Spanish speaking at 20% of the sample. The third largest group was a conglomeration of other Asian languages that comprised 16% of the sample. Other European languages and Middle Eastern languages each contributed another 4% of the sample. This bias toward Korean students in the sample was not unanticipated. Although the participating institution generally catered to foreign university students, their most consistent cliental were students from Korea. The sample for the main field testing actually contained a wider range of first language groups than anticipated, but the size of the sample and its subgroups was not large enough to conduct any correlational studies based on 1st language.

Table 4. 1st Language Background of ESL Participants

Language	N	% of Group
Korean	25	56
Spanish	9	20
Other Asian Languages Japanese (3); Chinese (2); Vietnamese (1); Thai (1)	7	16
Other European Languages French (1); Russian (1)	2	4
Middle Eastern Languages Farsi (1); Turkish (1)	2	4
Total	45	100

3.4.4 Data Gathering Procedures

An overview of the data which were collected during the main field test through the questionnaires and copies of exercises is presented in Table 5.

Table 5. Overview of Data Collection

		Level		Total
Materials	**7th**	**6th (1)**	**6th (2)**	**N**
Exercise 1				
No. Completed Tasks	10	15	17	
No. Response Forms	10	15	15	40
Exercise 5				
No. Completed Tasks	11	13	N/A	
No. Response Forms	11	11		22
Exercise 6				
No. Completed Tasks	11	N/A	N/A	
No. Response Forms	11			11
Exercise 7				
No. Completed Tasks	N/A	N/A	15	
No. Response Forms			15	15
Exercise 8				
No. Completed Tasks	11	12	16	
No. Response Forms	11	8	16	35
Handbook				
No. Distributed	13	16	18	
No. Response Forms	11	8	13	32

As the researcher, I collected the student demographic data during the start up sessions with each class, when consent forms were signed and the handbooks were first distributed to the students. I did all of the interviewing of teachers myself and the interviews were tape recorded. A reading guide was constructed using my thesis questions. It provided the general guidelines for the semi-structured interviews that I conducted with the two full-time teachers who contributed data in the preliminary field test. A few of the questions from the reading guide were also included in the final interviews with the teachers who participated in the main field testing. As the consent forms indicate, I had intended to interview the main field-testing teachers briefly after the presentation of each exercise and more extensively at the end of the term. However, I contracted laryngitis when it was time to conduct the first mini-interviews, so I developed a report form for the teachers to fill out instead. I maintained communication with those teachers informally through out the session. Then, when the main field test came near to a close, I developed a rough set of questions and some specific questions for each teacher, based on specific strategies they had used, comments they had voiced, or choices that they had made during the testing of the materials. These questions provided the guidelines to their final interviews. A copy of the general questions used in those interviews are also included in Appendix 4.

As only eight students from the 6th level decided to follow through with participation in group discussions, these data gathering sessions were held outside of the classes, in a room provided by the participating institution. All of the 7th level class agreed to participate in the group discussion, so Charlene agreed to schedule an in class observation (of their use of Exercise 8) and the group discussion on the same morning. The attendance at the group discussions came close to representing the full range of language groups involved (French was not represented). The group discussions were partially structured, as in each session, I clarified some of my rationale for designing the exercises and elicited student response to the rationale. As well, the students shared their own opinions about the materials. These sessions were tape recorded using an EPZ microphone.

The majority of the data collection was conducted by the teachers, as time was provided for the students to answer the questionnaires during class sessions. Each of the teachers distributed a copy of questionnaires after each exercise had been completed and taken up with the class. The students were given fifteen minutes to make their response. Then the exercises and the questionnaires were collected. The teacher would leave the response forms and exercise copies with the program secretary, once they were finished with them, and I would pick them up. I reviewed the data available from each group before conducting the group discussions.

The decision to collect copies of student performance on the tasks was made late in the planning stages. After I had determined the weaknesses in the handbook, I decided that I needed to see where the students were making errors on the exercises. The data were collected for the purposes of improving the exercise designs, not for reporting student performance. For a variety of reasons, the original exercises were returned to me rather than copies, so the students did not retain a copy of their work. This procedural decision resulted in some loss of integration between the exercises and the handbook, particularly in Charlene's class. She chose the strategy of filling out pattern analysis sheets for the students. That sheet was comparatively useless without a copy of the original exercise, as the handbook did not necessarily have an example of the specific errors being addressed. A few of the students complained about the collection of the exercises on the questionnaires.

and, in the group discussions, they reported that they would have preferred to keep the exercises to study from them. However, at this stage of testing, the materials were not considered fully integrated with the curriculum by either the teachers or the students, so full integration between the handbook and exercises was not expected on my part. I considered it a compliment to the materials that some of the students felt they were learning enough through the exercises to want to keep the copy.

The teachers also took responsibility for correcting a minor error on the exercise questionnaire. I had intended that two versions of the exercise questionnaire be xeroxed, one with the appropriate number for each level, according to the designations actually used at the participating institution. Specific mention of the level was relevant to questions 1, 9, and 11. However, as a result of an over sight, all of the questionnaires were copied with only the higher level indicated. Both Crystal and Bob noticed the error during their first use of the questionnaire and instructed their students that they were to respond according to their own (the 6th) level. Then arrangements were made to adjust the number on all of the other copies of the exercise questionnaire for the 6th level, to be sure that the students were responding appropriately.

During the main field test Bob and Charlene piloted the handbook questionnaire with students from the fall session. One student from the 6th level and two students from the 7th level read through the questionnaire and reported no difficulties with the language used. However, I made adjustments to the questionnaire because of the different approaches used in each classroom. I added questions, asking the students which sections of the handbook they had read and whether they had read it thoroughly or skimmed over it. I also inquired about their use of the index and their familiarity with resources. I felt that these additions were necessary if I were to interpret their responses to the handbook appropriately. The teachers then oversaw the data gathering using that questionnaire in their respective classes, as it suited their schedules, during the final week of the session. The teachers also provided data by filling out the exercise and handbook-introduction report forms. They submitted these to me along with the data from the students.

3.4.5 Consolidation and Analysis of the Data

The primary sources of data for the results and discussion presented in chapters four and five were the questionnaires for the students and the interview transcripts from the teachers. I transcribed the interviews conducted with Madeline and Gregory personally, but acquired secretarial assistance for transcribing the final three interviews. Once the transcriptions were completed, I reviewed the transcripts with the tapes and made a few minor adjustments, filling the occasional word or phrase which had been omitted because the transcriptionist was unfamiliar with certain technical terms and or the context of the interviews.

The quantitative data from the exercise questionnaires were consolidated into one data-base using a fox-base application. For each exercise, the data were entered using the indexes of student number and teacher number. Then a value for each of the twelve Likert-type questions on the form were entered. Because some exercises had only been completed by one or two of the classes, a value of "0" was used to indicate "no data". The numbers from "1" to "5" represented the exact values indicated on the Likert-type scale. The data set was then processed using a statistical package to indicate the percentage response on each of the values, and the number of students for which the percentages were calculated. I maintained all five distinctions rather than condensing the data into a two way negative or positive response, because I noticed that certain exercises prompted stronger responses, and I wanted that distinction to be evident. Crosstabulations were obtained for the data from those exercises where two or more classes provided a response to determine any cases where there might be an important difference between the groups. However, in most cases there were no significant differences. The results for the exercises were charted on the basis of combined responses from the 6th and 7th levels, in all of the cases where more than one group was involved. Significant distinctions that did occur in the responses between the 6th and 7th level students will be discussed in chapter four. However, the differences are not reported with any tests of statistical significance or any emphasis on significance due to the small size of the sample. The data are considered to be representative of classroom dynamics and are useful for the formative evaluation of the materials, but they are not considered valid measures for inferential purposes.

On approximately 55% of the distributed questionnaires (123 exercise questionnaires) students provided some additional explanations for their responses to the rating of the questionnaire items. Although the comments were not all of equal quality, some of them were chosen to complement the numerical data. The results and discussion of the teacher and student responses to the exercises are reported in chapter 4.

The results from the handbook questionnaire were totalled and translated into percentages manually, due to the smaller amount of data (32 handbook questionnaires were returned). A series of tables were constructed from the data. The data were presented as one group, because the intent had been to create one manual which was equally useful for both the 6th and 7th levels. Again, comments were used to complement the numerical data presented in the tables. The results and discussion of the teacher and student responses to the handbook are presented in chapter 5.

The transcripts from the preliminary field test were analyzed in terms of initial predictions regarding the type of response I could expect from the teachers and students in the main field testing. These findings were then compared and contrasted to the actual results from the main field test. During the preparation of the reading guide which structured the preliminary interviews, I pre-imposed the themes of familiarity, readability and usability with respect to the handbook, as these factors appeared to me to be critical for successful reception of the materials. The transcripts from the teachers in the main field test were analyzed for parallel expressions of those themes. The handbook questionnaire for the students was also tailored to providing information around those themes.

The data from the group discussions were collected primarily for triangulation purposes. The tapes were not transcribed. Instead comments from the students, which added to the data beyond the information provided through the questionnaires, were transcribed by hand and included in the results and discussion in chapters four or five, as appropriate.

The following criteria were used in choosing comments. Every attempt was made to balance the positive and negative comments, regardless of the percentages rating of agreement and disagreement in the tables. Negative comments tend to give the best indication of how to improve the materials, even if they are not representative of the entire group response. Comments which confirmed areas of weakness that had already been acknowledged, but for which change had not yet been implemented, were also considered important. Comments that acknowledged the rationale for the material were included, as well as those which addressed theoretical constructs or issues from the ESL (composition), adult education, and instructional design literature. Every attempt was made to acknowledge the range of concerns that were expressed, regardless of the exact number of times that each was mentioned. However, not all of the concerns were given equal weight in terms of recommendations for actual improvement in the materials.

Teacher and student comments were edited according to the following procedures. False starts were deleted from both teacher and students comments, as these undermine the coherence of the response. Repetitions were removed to make responses more concise. Colloquial usage, which is ungrammatical by written standards, was not removed from teacher comments, except for filler statements, which made the response less concise. Grammatical errors were not removed from student comments, although a few corrections were inserted. Comments written at different sections in the questionnaire were sometimes combined to give the general sense of the individual student's response. The amount of data did not warrant trying to compare specific student comments on each rating. Comments which were incomplete without statements from the questionnaire are presented with the statement inserted between brackets.

Chapter 4: Response to the Exercises

Results, Discussion, and Recommendations

4.1 Teacher Predictions and Exercise Selection

The teachers who reviewed the exercises in the preliminary field testing made some predictions regarding their usefulness for the students in the 6th and 7th level classes. These early predictions are reported and then contrasted with the opinions and experiences of the teachers who participated in the main field test. The responses are answers to research questions 1a) and 1b), repeated here for your convenience:

1a) How do ESL teachers rate the sample of exercise-types for usefulness with regard to the following criteria:
  i) general suitability for a writing class in comparison to sentence level and sentence combining exercises?
  ii) potential for teaching awareness of English connectivity patterns?
  iii) potential for teaching recognition of connectivity errors in editing cycles?
  iv) potential for teaching revision strategies that require awareness of connectivity?
  v) potential for contributing to better connectivity choices in initial drafting?

1b) What do ESL teachers recommend for exercise sequencing and potential ways to employ the exercises, with regard to the:
  i) comparative difficulty of the exercise types?
  ii) exercise length and proficiency level?
  iii) time limits on exercises and proficiency level?

4.1.1 Predictions by Reviewing Teachers

The two reviewing teachers, Gregory and Madeline, agreed on some of their judgements regarding the suitability and potential usefulness of the exercises but differed significantly on their judgements regarding the difficulty of the exercises. Both concurred that they preferred to work with the students' own writing and larger units of writing rather than exercises, whenever possible, but recognized that exercises can be useful for modeling certain aspects of the language.

When he was asked to compare the exercises for their general suitability for a writing class in comparison to sentence level and sentence combining exercises, Gregory emphasized that the value of these particular exercises is the presentation of larger units of discourse. He also maintained that sentence level and sentence-combining exercises can be useful in advanced levels, if they are taught with an emphasis on building towards effective writing of larger units:

> It's not really a part of our curriculum, but I think it is quite useful. I often put something like this in my lessons, because the students feel that they need it and I feel that they do, too. This presents larger units of discourse, which is close to the ultimate goal of language instruction. And lessons that just break up the language and just give sentence fragments or language fragments don't help the students writing large units or speaking maybe longer speeches. At the 7th level, we aim at large essays. One of the main things we teach is a term paper. However, I found that they do need help with the smaller units, working towards the goal of putting together a larger essay. So as long as that ultimate goal is kept in mind, working with sentences is a good thing. (Interview Transcript #1 - lines 640- 663 - edited)

Furthermore, Gregory agreed that the exercises had potential to contribute towards teaching awareness of connectivity patterns (for variety in stylistics and text-type), editing skills, and revision strategies. However, he did not identify any difference in the comparative difficulty of the exercises. He viewed all of the exercises as being more relevant to students at the 6th level than the 7th level, with the exception of the individual needs of certain students in the 7th level:

> At the 6th level especially that might be very useful. Although I haven't taught that level, an important part of what they do is to learn more than just one way that works in presenting things. And I do some of that with the 7th level students. They need a variety of ways of expressing the same thought, fluency. And if I understand what you mean by connectivity patterns, it may be useful in that way. Now something like this I have often taught in the 7th level, although it's not specifically on the curriculum. It's just to help them with their larger essays. According to our curriculum, it's not really important for the 7th level students, but they have individual needs. (Interview Transcripts #1 - lines 694-706, edited)
>
> I think most of them {the exercises} would mostly be appropriate for the 6th level. [The] 7th level students, in some cases, can be, I guess, proud. They don't like to do anything that's beneath them, that's for the lower level students. And most of the material, I found, was a little bit simple for them, the 7th level. (Interview Transcript #1 - lines 824-828, edited)

His major concern about the suitability of the exercises for the 7th level was the potential student boredom and the need for the students to be well versed in the concepts from the handbook to gain maximum benefit.

> It really depends on how fast the students become bored with this material, because they've been through language lessons which in most cases have not been good, in their own country. Difficult, boring, grammar lessons. And they tend to tune out very fast, when something looks like something they came from. They want something completely new from us. They want a lot of conversation and writing larger units. But this might help them at the 7th level to recognize their own writing errors. If it helps, I would do something like this in my classes, at the beginning of the day. For 10 to 15 minutes, I give them a little lesson, we'd have some discussion, and I would give them

> feedback. And then, as I was correcting their writing, I would just make a little note, saying, "We talked about this in class", or I would just circle something and let them correct it from memory. I think it's potentially quite useful Students would have to be well versed in the concepts, but if they were and if we could show them that these are tools that are quite useful, they could be well motivated to use the materials. (Interview Transcript #1 - lines 714-732; 780-784, edited)

For the students in the 7th level, he anticipated that the exercises could eventually contribute to improvements in their initial writing, particularly if they were well integrated with the handbook. He recommended introducing the lessons as a means to teach the concepts in the handbook, and then he would expect and emphasize transfer to the students' own writing.

> Okay, initial writing. Now, if we can present this as an interesting, new idea, a package of tools to improve your writing, I think they would find it quite useful, and that they would use some of these concepts, if they were taught properly. If they use these ideas for revising, they will eventually use them for the initial draft.
>
> For teaching theoretical concepts, if the 7th level students are told that these exercises are to help you learn these things so that we can use them later in speaking, or reading, or writing in larger units, I think they would accept it, ...even if it was simple, if they understand that they're working on a theoretical concept. (Interview Transcript #1 - lines 796, 801-806; 876-881, edited)

Gregory thought that the exercises were a suitable length as they stood and did not recommend making anything longer, because of the extensive amounts of reading already mandated in the curriculum. He considered the time limits set for the exercises to be a reasonably good, educated guess, which would have to be tested in the classroom.

In contrast, Madeline's response to the same questions differed considerably. She did not consider sentence-combining exercises a valid task for ESL students, claiming that they were not successful as a teaching tool for writing classes.

> I don't like sentence combining exercises. I don't like them at all. I find, that for you and I, when English is our first language, ... I enjoy doing them; but for the non-English student, they can't [do them]. They haven't got the feel, because -- of course -- we ought to be teaching them how to put ideas together, or why this one goes with that. We know why. They don't. That's what they have to learn. And I find that in sentence combining, it's not good. It's just not successful. Not that they aren't done a lot. They are done a lot. But I find that they are frustrating. They [the students] don't come up with the kinds of sentences that you and I would. Maybe grammatically, noun-verb, they get that, but the intuitive feel for the meaning is missing. And I've used in workshops, something that I've used in class. I've actually had language teachers combine them, and, of course, they're a lot of fun, and they get beautiful sentences out of them. But those same sentences are not what the students would do... (Interview Transcript #2 - lines 439-450;468-485, edited)

When she was asked to comment directly on the suitability of the exercises in *Text Profiles in English Language Connectivity,* Madeline informed me that she had tried some of the exercises herself. The rational option cloze she found easy. She considered it appropriate for the students. However, as a very well-educated native speaker, she judged the rational gap cloze task to be very difficult. So she was concerned that it was too difficult for students at the 6th and 7th levels. Nevertheless, she did clarify that the objectives for the exercise were important and focused on things that ESL students need to learn:

> These spaces that you've provided, I know they are really some important things that they need to discuss. It's just, it's difficult. That's all I'm saying. What you're getting at is important. It's just difficult.
>
> Sometimes they get really angry if they think this is difficult for native speakers and: "You expect US to do it?" Sometimes I have heard students say, "Native speakers can't do the TOEFL. Why should we have to? You expect us to do more than native speakers! Why do you expect me to do what a native speaker can't do?"
>
> It's a paradox, because this is what they need to be learning. But I see this as being too hard. And you can only do so much of this discussion that you've got earlier in the [handbook] where you've got a complete text there and it's highlighted. For one thing, I think it's too long. Another difficult thing is the time. If it's too difficult they give up. (Interview Transcript #2 - lines 563-587; 611-619, edited)

The comment about native speakers not being able to pass the TOEFL should not be taken as indicative of the teacher's position or beliefs, rather it is an illustration of the types of complaints that ESL students have made, on the basis of rummors about the difficulty of the test. Although ESL students who attend Western universities are actually in competition with some of the best students these countries have, some do not accept comparison to well-educated native speakers to be fair. The teacher is voicing the concern on the basis of her own status as a very well-educated speaker (Masters level degree - cf. Table 2).

Madeline also raised concerns about the cultural content or background knowledge relevant for comprehending the texts, with respect to the rational gap cloze task. Her comments were based on the text by Margaret Laurence, which she had attempted:

> Again, I have the background knowledge for a lot of this, and that's not the same, "rutted snow, mitts". This is part of my vocabulary. But a Korean student might not know already about a sleigh. Of course, that doesn't mean they shouldn't learn, because it is part of our culture. And in winter, they'll certainly know what mitts are.
>
> Maybe what is important, then, is for the teacher to talk about what this thing is about, to introduce it, so they know what the story is, so that it's easy for them to find. But then again, I had the background knowledge and I still found it difficult to come up with the right answers. I had an answer you know. I filled in every blank and I didn't have the right answers. (Interview Transcript #2 - lines 660 - 709, edited)

When questioned about whether the exercises had potential to contribute to editing and revising skills and eventually to the students' writing, Madeline responded positively. She agreed that ESL students are often not conscious of the difficulty that they have with connectivity problems, when transitioning from sentence level grammar tasks to their writing:

> I think unless you do raise their awareness, they don't know that this is a problem. And it is a problem. There is a real need for the kind of work that you are addressing, oh definitely. I see this as one of the major problems that we deal with at this level, when they have better vocabulary, and they have better sentence structure, and they have so much else. This is still a problem. But I do like to work from their work rather than from these kinds of exercises. However, how to get to the point where they can write their own work, so that you've got that much to talk about, is what this book is trying to address, I think, by having you fill in or [providing] a choice to circle.They do have to have some of these exercises that teach them how to use the language. They have to see examples of where it's used correctly in the language. (Interview Transcript #2 - lines 734-736; 746-751, 1111-1116, 1193-1197, edited)

Although the reading guide had requested a comparision of the exercises types, after Madeline had attempted the first two exercise types, she did not review the rest of the package. She was not aware of the three other exercise types, nor did she attempt to do them. Consequently, she was not able to make further comparisons among the exercises.

In summary, it is apparent that both teachers saw potential in the exercises for models of good writing and for raising student awareness of connectivity problems. It is also clear that the philosophy of working with the students' own work is predominant, and the teachers clearly place high priority on being able to transition from the exercises to the students' writing. There was, however, considerable difference in their assessment of the difficulty of the exercises for the 6th and 7th level students. Furthermore, they did not offer detailed comparisons of the difficulty between the tasks, with the exception of Madeline's concerns regarding the rational gap cloze task. Gregory based his judgements on his estimation of the reading level of the assignments and his experience with the 7th level students, whom he generally considered to be strong in grammar with comparatively more need for attention to vocabulary. He considered the tasks to simply be longer versions of types of tasks that were already familiar to the students. Madeline based her judgements about the exercises on her own abilities as a native-speaker, her experience with student reactions to difficult materials, and the construct of background knowledge on performance, which is addressed in the ESL reading literature. It seemed that the actual experience of field testing the exercises in the classroom was necessary to get better feedback about detailed features of the tasks, such as the comparative difficulty, the length, the time requirements, the recommendations for sequencing and the appropriateness of each for the two most advanced levels.

4.1.2 Criteria for Exercise Selection used by Field Testing Teachers

An important measure of the suitability of the exercises is the ease with which the field testing teachers were able to integrate them with the other materials required by the overarching curriculum. During the final interviews, I asked each of the three field testing teachers to state their criteria for choosing the particular exercises that they had used. Their rationale provides evidence for the suitability of the sample exercises in terms of text-type, topic, comparative difficulty or process-oriented writing theory. The teachers were also considerate of the need to field test across the range of types of exercises. Nevertheless, they balanced that consideration with priorities that the curriculum outlined for student learning.

Charlene, who taught the 7th level, provided the following rationale for her choices:

> They have to do a debate and they have to do an argument paper, so that's why I chose those argument exercises, because that's part of the work at the 7th level. And then I wanted also for you to see how different types of exercises work. We did two of the cloze, and then the open cloze where they have to provide the word, and the editing. And also, editing is part of the work they have to do. So, I thought it'd be reinforcement for what they have to do in the program here.
>
> That last argument paper, that gap cloze exercise, that we looked at because the Stone Angel deals with religion, Christianity. Religion is a theme, you know. (Interview transcript #3 - lines 9-16; 202-205, edited)

Crystal, who taught one of the 6th level classes, reported more concern over the comparative difficulty of the exercises and the amount of heated discussion that might be generated by the more open ended tasks:

> To tell you the truth, I looked at whether they would be able to do it. Exercise 8, the learning style one. I did this because we were doing a lot of essays and they were having to edit their own work and change errors and so forth. And this is kind of what I do on their essays, so I thought it would be a good practise for them to look through a passage to get an idea, because they often miss errors. The other one, Exercise 5, I looked at the particular grammatical structures and just thought that the prepositions and a lot of those errors [were ones] they were making. And then the other point that I brought up first was that there were a few that I thought would be too difficult for them, the 6th level, so I thought that I didn't want to intimidate them. You know, if I were a student looking at it, and looking to see if it was too intimidating or not. And I also felt that with the blanks, I didn't really look at it that closely, but I was concerned that there would be such a variety of answers that they would end up in a lot of discussion or heated discussion. So I wanted something that was more closed. I mean obviously there are the correct answers to this, okay, but I also thought we'd get a real variety with the blanks. Then you have to go into, "You can't use that word because..." and so on. It was too open-ended. (Interview Transcript #4 - lines 41-58, 71-80, edited)

Bob, who taught the other 6th level class, chose his particular exercises more on the basis of how they related to the writing process. He stated that he had difficulty in getting topics to match up with his approach to the overarching curriculum. He reported his criteria as follows:

> Well, part of it was from your suggestion. And then I just kind of looked at the ones that were current topics related to what we were talking about, and that always didn't work. So then I'd look for stuff relating to skills in writing that I wanted them to pick up. See, number 8 I did because this is very much what they do when they have to do their paragraphs. Except here there's nothing pointed out for them, what the mistake is. They have to pick them out on their own. Normally when they'll write an essay or whatever, I'll point out the errors and then they have to fix it. But this one they didn't have anything. So I thought it would be a little bit more of a challenge for them. It's something that they need to do, be more analytical of their writing. This one too {number 7 - Revision Exercise}. That's kind of the way I introduced that one too. It's kinda gonna be more [difficult]. They were gonna have to revise it and think of ways that they could possibly revise it. And number 1, I didn't really do it in [at] the time that I should have. Like going back now, I would have done it at a different point in the course; but that one was more peer pressure from the other teachers and stuff. [I would have done it] when we started talking either about business or [when] we did a unit on communication. It would have probably been later than when I originally did it. (Interview Transcript #5 - lines 7 - 74, edited)

In terms of a general response to the exercises, with respect to the criteria outlined in questions 1a) and 1b), the response of the field testing teachers both supported and contradicted different facets of the original predictions. All of the teachers agreed with Gregory on the suitability of the tasks for writing classes because of their use of extended discourse and the emphasis on context. They largely supported the need for the students to get more direct teaching about relational concepts, because very few of the ESL students are able to function as independent (or self-directed) learners and make the integration between the handbooks and the exercises independently. According to Charlene and Crystal, there was a significant need for a change in attitude among some of the ESL students. They claimed it takes time for some of the ESL students to mature beyond learning grammar just to pass the TOEFL and to begin to think about how to use grammar in their writing to express what they mean. As a consequence, they admitted a real need for tasks that help the students understand that grammatical knowledge plays a part in the effectiveness of their writing as a form of communication.

Overall the teachers rated the tasks as being at a higher level than and different from other types of tasks that the students attempted at the lower levels in the program. They saw the tasks as requiring the students to make more integrated use of their grammatical knowledge and to make more independent judgements, in recognizing errors or appropriate English language usage in context. Charlene did not share Gregory's concern that the tasks were too simple and might be interpreted by the 7th level students as being beneath them. She emphasized, in contrast, that the structure of the placement test allowed for a considerable range in the writing skill and grammatical knowledge of students in the level.

Charlene attempted the rational gap cloze task with the students in level 7. The concern Madeline voiced about the difficulty of the rational gap cloze task was further supported and the outcome is discussed in detail in section 4.2.3. Bob and Crystal both agreed that the rational gap cloze task appeared to be too difficult for the 6th level, although Bob indicated that he might have attempted it, had he been free to commit more time to the materials. These comments indicate that the field testing teachers recognized differences in the suitability of the exercises with respect to their particular levels. Further evidence regarding the suitability of the exercises and recommendations regarding sequencing are reported in more detail in section 4.2, as teacher perspectives on specific exercises are combined with the student response.

4.2 Student Response and Teacher Perspectives

Data were collected through the exercise questionnaire to gage the student response to the five different exercises that the field testing teachers chose to use. The student response has been compiled into tables, where the statements from the questionnaires and their ratings are organized in terms of their relevance for research question 1c):

1c) How do ESL students respond to the exercises on the following criteria:
  i) the appropriateness of the task?
  ii) learning achieved through the task?
  iii) the relationship of the task to revising, editing and writing skills?
  iv) time allotted for the task?
  v) the clarity of the written instructions?
  vi) the visual appearance of the task?

Responses to parts of question 1c) which are best explained in terms of recurrent findings across the the exercises are reported in the summary, section 4.2.

The questionnaire prompted the students to provide reasons for their ratings and about 55% of the 123 forms came back with additional comments for at least one or more of questions. The quality of these responses varies considerably, but they provide some additional insight into the student rating of the exercises. During their interviews, the field testing teachers also made comments which either affirmed student opinions and preferences or qualified their comments. The teachers did not support student complaints if they felt that the features of the exercise were in harmony with the requirements of the curriculum.

4.2.1 Exercise 1: Instructional Text - Rational Option Cloze

Exercise 1 is a rational cloze option task designed with a text which is classified as the instructional text type. The topic is effective communication. The time limit suggested for the task was 7 minutes. All three of the classes attempted the task, at different times, with a total of 40 students providing feedback through the questionnaire. The descriptive statistics from the students' rating of the exercise on the five point Likert-type scale are provided in Table 6. Cross-tabulation of the ratings by each class indicated no noteable differences between the groups on their responses.

A summary of the responses in terms of combined ratings (i.e., agree/strongly agree or disagree/strongly disagree) indicate that 85% of the students agreed that the task was appropriate to either the 6th or 7th level and the same percentage agreed that the vocabulary level was appropriate. A few of the student comments indicated that in some respects the vocabulary was a little simple for the expectation of the students in the 7th level. Ninety percent of the students agreed that they would find it useful to do more of this type of exercise. Fifty-six percent agreed that they experienced new learning of English language connectivity; however, some of the students who did not report new learning, indicated by means of additional comments that they found the practise useful and appropriate. Seventy-three percent agreed that the exercise makes learning English grammar more meaningful. Eight-two percent of the students agreed that the task was helpful for learning editing skills; 87% agreed that the task was helpful for learning revision skills; and 85% agreed that the task was helpful for learning to write better. These positive judgements are encouraging in light of the fact that 50% of the students reported being dissatisfied with their own performance on the task; as well, 65% agreed that there needed to be more discussion with or explanation from the teacher with the exercise; 63% disagreed with the time limit set for the exercise.

Additional comments from the students regarding reasons for their dissatisfaction with their performance varied. Some examples were: not meeting self-expectations (i.e., making more errors than they had expected), managing time poorly, needing more time to finish, losing time because of stopping a lot, and confusion about the format of framed answers. Others indicated, however, that the time pressure was part of what made the task appropriate to the level:

Table 6. Student Response To Exercise 1

Research Question	Questionnaire (No.)	Ratings					
		strongly disagree	disagree	agree	strongly agree	unable to judge	student N
1c - i)	an appropriate task for 6th/7th level (1)	0%	10%	70%	15%	5%	40
	appropriate vocabulary for the 6th/7th level (9)	0%	15%	75%	10%	0%	40
	satisfied with own performance (10)	3%	48%	43%	3%	5%	40
	more of this type of exercise would be useful (11)	0%	3%	82%	8%	8%	38
1c - ii)	new learning of English language connectivity (2)	0%	26%	51%	5%	18%	39
	makes learning grammar more meaningful (7)	0%	18%	53%	20%	10%	40
	needs to be more discussion and explanation (12)	0%	28%	49%	15%	8%	39
1c - iii)	helpful for learning editing skills (4)	0%	8%	64%	18%	10%	39
	helpful for learning revision skills (5)	0%	3%	72%	15%	10%	39
	helpful for learning to write better (6)	0%	8%	62%	23%	8%	39
1c - iv)	enough time given to do this exercise (8)	10%	53%	38%	0%	0%	40
1c - v)	clarity of written instructions (3)	3%	31%	44%	21%	3%	39

Student #26:	We have been learning this kind of grammar. But that is not easy for 7 minutes.
Student #42:	The level of this exercise is not so easy (time) nor difficult (if we have time, it would be easier).

The teachers generally agreed that the time pressure did shake the confidence of some of the students and that they were not used to tasks that framed the choices in running text. However, they also agreed that comparison to native speaker processing abilities is appropriate and that ESL students do need to be made aware of how well they process the language under time constraints. For example, Bob stated:

> I usually wait until most of them are done and I kinda check: "Is everybody done now?"; but with this, after the certain amount of minutes I would cut it off, and I think it's good. I usually go too much the other way. I let them all finish first, so I think it's good to time things like that. Well, no, I shouldn't say that, cuz I do have other things where I time them and cut them off if they're not done. So, I think it's good to have a balance of both types. They need to work under pressure sometimes and experience that." (Interview Transcript #5 - lines 285-294, edited)

4.2.2 Exercise 5: Argumentative Text - Rational Option Cloze

Exercise 5 is also a rational cloze option task, but it is based upon a text which is classified as argumentative and whose topic is world hunger and world armament. It was attempted by 22 students in two different classes. Eleven of them were from Charlene's 7th level class and the other 11 were from Crystal's 6th level class. The descriptive statistics from the students' rating of the exercise on the five point Likert-type scale are presented in Table 7.

A summary of the combined ratings (i.e., agree/strongly agree or disagree/strongly disagree) indicate that 73% of the students agreed that the task was appropriate to the 6th or 7th level and that 73% also found the vocabulary appropriate for both levels.

However, the cross-tabulation of the responses reveals differences in the response according to groups, on these two particular ratings. The response from Crystal's 6th level class was split 55% disagreeing with the appropriateness of the task for the level and 46% agreeing with its appropriateness. In contrast, the response from Charlene's 7th level class was 100% agreement for the appropriateness of the task for the level, with 18% agreeing strongly. With respect to the appropriateness of the vocabulary, the response from the 6th level group was a split 45% disagreement and 45% agreement, with 9% (1 student) unable to judge, whereas the response from the 7th level was 100% agreement, with 27% strong agreement.

Table 7. Student Response To Exercise 5

Research Question	Questionnaire (No.)	Ratings strongly disagree	 disagree	 agree	 strongly agree	 unable to judge	 student N
1c - i)	an appropriate task for 6th/7th level (1)	0%	27%	64%	9%	0%	22
	appropriate vocabulary for the 6th/7th level (9)	5%	18%	55%	18%	5%	22
	satisfied with own performance (10)	5%	50%	46%	0%	0%	22
	more of this type of exercise would be useful (11)	0%	18%	64%	14%	5%	22
1c - ii)	new learning of English language connectivity (2)	10%	19%	62%	0%	10%	21
	makes learning grammar more meaningful (7)	5%	30%	40%	20%	5%	20
	needs to be more discussion and explanation (12)	0%	18%	59%	18%	5%	22
1c - iii)	helpful for learning editing skills (4)	5%	14%	59%	18%	5%	22
	helpful for learning revision skills (5)	0%	9%	50%	18%	23%	22
	helpful for learning to write better (6)	0%	14%	68%	14%	5%	22
1c - iv)	enough time given to do this exercise (8)	5%	41%	46%	9%	0%	22
1c - v)	clarity of written instructions (3)	5%	23%	41%	23%	9%	22

What the cross tabulations reveal, in this case, is the comparative group dynamics that each teacher likely had to deal with in terms of student satisfaction with the appropriateness of the exercise. Although the numbers have no inferential value, they may be representative of the individual classroom setting. This difference was not particularly surprizing to me, as the designer, since I had intentionally designed Exercise 5 for the 7th level. Furthermore, the satisfaction and dissatisfaction were reflected in the types of comments that the 7th and some of 6th level students wrote:

7th level student:	I'm learning something new, at last I'm testing my skills.
7th level student:	This is not too difficult nor too easy for the 7th level.
6th level student:	It challenge our grammar knowledge, but sometimes the exercises are kind of confusing. I think they help us.
6th level student:	The article is difficult for me. The vocabulary was hard for me, but I don't know what other students think.
6th level student:	While I was reading the article, I was confused about the story (plot) of this article and I had to be hurry because of a lack of time. Actually, there are so many good vocabularies, but when students read the article, they can't catch the voc. because we are in hurry.

Also, from her perspective as the teacher, Crystal concurred that more of her students found Exercise 5 a more difficult task than Exercise 1. This was possibly because of less experience with the text-type, as well as the vocabulary:

> And I think once again that was, possibly, just the topic, ...maybe because it was argumentative text, Exercise 5. We were doing persuasion essays and we were looking at a lot of editorials, other samples of persuasive essays. So they have had this kind of text, but not a great deal, mostly in this course. And at the time we did this one, we were just getting into that persuasion, and debates and so forth, so I don't think they were that familiar with it and probably didn't catch on to it. (Interview Transcript #4 - lines 326-347)

Crystal thought that for some of her students, this course might have been their first exposure to the text-type (in English). She agreed that, in terms of sequencing, the results might have been better for those students who were being exposed to the text-type for the first time, if she had used the exercise later in the course. She also sensed that somehow the students did not grasp that particular text holistically. Their comprehension seemed fuzzy in comparison to their work with Exercise 1, where the text-type was instructional and the topic was communication.

From the group discussion held with a few of the students from her class, further insight was gained into the way that difficulty with vocabulary affected their ability to get the more holistic sense of the text. A number of the students had difficulty grasping the background to the text, because they had not grasped certain key terms. For example, some did not understand the word "armament" in the title, so they failed to realize that the text was addressing situations where world hunger was related to war or to decisions by certain states to invest in weapons, rather than feed their people. Consequently, they thought that it might be better that the teacher provide a general introduction to the background of the text.

When I questioned Crystal about discussing some of the vocabulary before the exercise, she said that whether or not she discussed vocabulary prior to the task, depended upon whether or not she was trying to determine student comprehension level. In those cases, she did not discuss vocabulary ahead of time. However, if the students were being prepared for discussion around a text, she would introduce vocabulary to facilitate comprehension and the discussion. Through our discussion, it was established that including background information in the teaching strategies would be helpful. Crystal thought that some help with vocabulary might reduce student anxiety regarding the task. I also thought that some key nonrelational vocabulary with definitions could be made available for use, prior to the exercise, at the teacher's discretion. Use of vocabulary helps would depend on a teacher's purpose for the task and estimation of student familiarity with the topic.

The 7th level students did not need that type of support. They were comfortable with the vocabulary and were able to activate appropriate background knowledge. However, in terms of a representative class size, about 45% of the 6th level students were not comfortable with the vocabulary and were not able to establish the context properly. It was also apparent from the copies of the completed tasks, that the 6th level students had more difficulty with the exercise.

In spite of these differences between the two levels, overall, 62% of the students agreed that they experienced new learning of connectivity through the task, and 60% agreed that the task made learning grammar more meaningful. Furthermore, 77% of the students agreed that the task was helpful for learning editing skills; 68% agreed that the task was helpful for learning revision skills; and 82% agreed that the task was helpful for learning to write better.

Because the task was an argumentative text, which is usually relationally more complex than the structuring of instructional text (Exercise 1), the time limit was set at 9 minutes (for a similar amount of text). In this case, 45% of the students still disagreed with the time limit; 55% were dissatisfied with their own performance on the task; and 77% agreed that there needed to be further discussion with or explanation from the teacher.

4.2.3 Exercise 6: Argumentative Text - Rational Gap Cloze

Exercise 6 is a rational gap cloze task based on a text which is classified as an argumentative text and whose topic is the logical consistency of the biblical concepts of God's omnipotence and goodness in the face of the apparent contradiction of human free will and suffering. This task was attempted only by the 7th level class, with feedback returned from 11 members of the group. Each student was given 20 minutes to attempt the task individually. Then the students were given another 20 minutes of group work on it. The descriptive statistics from the students' rating of the exercise on the five point Likert-type scale are presented in Table 8.

The performance of the students on the task and their feedback on it, largely supports the earlier concerns about the level of the rational gap cloze tasks, raised in the preliminary field testing by Madeline and the ESL student. In comparison to the ratings in the other exercises (cf. Tables 6, 7, 8, 10), this is the only task with a high disagreement about task appropriateness for the level, with 64% disagreeing. It is also the only response where the percentage of disagreement over the appropriateness of the task has an apparent relationship with the student's lack of satisfaction with their own performance, with 73% indicating that they were not satisfied with their performance. Furthermore, it is the only task where there is a discernable shift to disagreement about the usefulness of more of the type of exercise, with 55% disagreeing and 45% agreeing. In the other tasks agreement for further usefulness ranges from 65% to 89%, with three out of the four tasks ranging from 77% to 89% agreement. There was also a fairly evenly split response to the time limit, with 36% of the students disagreeing and 46% of the students agreeing that there had been enough time to do the task. Exercises 1 and 5 had higher rankings for disagreement on the time allotted (63% and 46%). Exercises 7 and 8 had lower rankings for disagreement on the time allotted (13% and 18%).

Comparative data for group performance on the rational option cloze tasks were available but unanalyzed. There was at least a 50% drop in student scores, between their performance on the option task and the gap task. In many cases the differences was more. However, due to teacher feedback about motivation to complete the task, the 50% may be a more realistic estimation of ability. For most of the students, 40% of the blanks or more were left without a response. Many of the responses were either syntactically wrong or pragmatically (i.e., socially or stylistically) less preferred, considering that it was a formal

Table 8. Student Response To Exercise 6

Research Question	Questionnaire (No.)	Ratings: strongly disagree	disagree	agree	strongly agree	unable to judge	student N
1c - i)	an appropriate task for 7th level (1)	9%	55%	18%	18%	0%	11
	appropriate vocabulary for the 7th level (9)	9%	9%	64%	18%	0%	11
	satisfied with own performance (10)	9%	64%	18%	0%	9%	11
	more of this type of exercise would be useful (11)	18%	36%	27%	18%	0%	11
1c - ii)	new learning of English language connectivity (2)	18%	9%	64%	9%	0%	11
	makes learning grammar more meaningful (7)	0%	36%	55%	9%	0%	11
	needs to be more discussion and explanation (12)	9%	36%	36%	18%	0%	11
1c - iii)	helpful for learning editing skills (4)	0%	27%	64%	0%	9%	11
	helpful for learning revision skills (5)	0%	27%	64%	0%	9%	11
	helpful for learning to write better (6)	9%	9%	64%	9%	9%	11
1c - iv)	enough time given to do this exercise (8)	9%	27%	36%	9%	18%	11
1c - v)	clarity of written instructions (3)	0%	36%	64%	0%	0%	11

type of academic text. In a few cases, however, the students did produce acceptable alternatives and they were able to produce some choices that were the author's exact-word usage.

It is interesting to note that 82% of the students did consider the vocabulary level of the text to be appropriate to the 7th level. Some of the student comments indicate that the integrative nature of the task and the level of the grammar, the range of grammar items tested, and grammar usage in writing compared to speech had more to do with their difficulties. A couple of the students noted, in particular, the similarity to difficulties in word finding. One directly compared the task to word finding when writing.

Student #34:	You should specify the part of speech.
Student #35:	It might be appropriate to very advanced students, which I am not. I think I did pretty good if you take in consideration my grammar's level.
Student #36:	There is no limit choice. Questions have new view point of connecting words. Answer is easy. But we can not choose it. Write is the same thing. Little bit connect with grammar, not so much.
Student #38:	English grammar is very changeable in the casual speech. When we make a conversation with somebody and if they communicate with each other without the difficult grammar. We would not need it. I was strongly shocked by getting my scores after I checked it out with my instructor. I was terribly disappointed at my ability.
Student #39:	Even though we are in the last level, the exercise is confusing, because we can change the meaning of the essay. They {the instructions} were clear alright, I just have problems finding the right word. No problems with vocabulary. I just couldn't find the right words.
Student #40:	It's an appropriate task but quite difficult. One has to have a good sense of English to do this exercise. This exercise is very useful. It is helpful for understanding English. I like this kind of exercises.
Student #41:	It is sophisticated. It is a new way of practising English sentences and their structures. {It makes learning English grammar more meaningful} cause we have to think all possible answers.
Student #42:	{It can help student learn editing skills} because this exercise has logical patterns. It took a long time to understand the context. I was barely able to answer it correctly.
Student #43:	You must be kid in [sic - kidding]. I think it is even hard for native speaking people. The contant [sic - content] is probably good for people that study Philosophy not ESL student. As I said, the idea is good but the contant is irrelavant.
Student #45:	Very good for reading, understand contexts and the whole story. I learned another way to think and figure out the proper words in sentences. It is helpful to think proper words and choose them from a lot of vocabularies. I know my ability. I know this is too difficult for me.

The actual feedback from the students was more balanced than I expected, after hearing concerns expressed by Charlene, as the field testing teacher. Student complaints about the vocabulary were connected to the content of the text and lack of interest in the topic. Three students out of eleven directly complained about the topic. The previously quoted student comment (#43) about topic irrelevance was made by an Iranian student, who was actually quite offended, in a cultural sense, by the text. A couple of other students who were not particularly offended by the topic reported that they lacked the background knowledge to establish the context, yet the vocabulary was generally reported as acceptable for the level. In the preliminary field testing (cf. section 3.2.5), I had actually asked a student about the potential offensiveness of the topic. The student was Korean, and his response was that Korean students were not likely to be offended by the text.

Charlene's feedback on the cultural and rhetorical difficulties of the text indicated that one Iranian student in particular had a strong, negative reaction to the task and that some of the others were disinterested. I received the impression that the student who was offended was vocal enough about it to disrupt the class or styme group work. Only after Charlene had expressed her concerns about the task did she recall that the theme of religion was actually consistent with one of the themes in the novel, *Stone Angel*, and that it was part of the reason she had chosen the text in the first place. Her comments about the topic and rhetorical style of the text were as follows:

> When you're doing testing, the context should be known to them, and that was totally esoteric -- the thing on God, can God exist? -- as two conflicting ideas. He knows everything, and I can't remember the specifics, but the concept is totally foreign to them. So I think if you had talked about something about taking ESL in a foreign country or something -- I know it's hard to find good examples and materials -- but I think they would have understood it more than the argument that they were presenting.
>
> [English rhetorical style for argument] is an entirely different style of rhetoric. I mean, Middle East people will mention what their argument is and then talk about everything else and then in their conclusion they will say, therefore, this is the right thing to do, but they never say **why** it is. They talk about how everything else is wrong. But we teach, I do, anyway, the rhetoric, the format, the structure of an argument paper or a contrast paper.
>
> But I do think sometimes the topic wasn't something they were interested in or even had any schema to relate to. In Middle East culture, you would never question whether God, Allah, could be right or wrong. And a lady from Iran, it was, like, you just don't question. I mean it would never occur to her to question that Allah was wrong or he could be wrong. It's just not done, so it's difficult for her to understand. Why would they question whether God is right or wrong? (Interview Transcript #3 - lines 131-139; 157-172, edited)

Charlene's comments draw our attention to another area where ESL students are reported to have difficulty in achieving in writing, according to Western university standards: the area of critical thinking skills. Fox (1994), Lee (1993) and Hemphill (1994) are research reports that directly addresses this issue. Hemphill (1994) in particular identifies the European cultural and philosophical roots of the linear approach to critical thinking skills, which is closely related to the formal rules of Western logic. He identifies three key thought structures that are typical to Western theoretical formulations of critical thinking:

> (1) One suspends hypothetically, in counterfactual fashion, a current set of phenomena (reasoning in the form of, "what if...")
> (2) One identifies assumptions, reasons, causes, and norms, employing the rules of Western logic.
> (3) One then calls these assumptions, reasons, causes, and norms into question, critiquing their basis and possible implications, in a formalized and often abstract way that again requires the application of the rules of Western logic. (p. 189)

Eastern styles of thinking, in contrast to Western logic, are identified as being based on "pragmatic clarity" (or practical, concrete usefulness) and group-centered thinking, which places the needs of the group above individual interests (Hemphill, 1994; Willis & Dillworth, 1996). The style of Korean academic writing and of other Eastern cultures (Chinese, Japanese, etc.) is considered to be quasi-inductive (proceedings from general, and sometimes loosely related examples, towards a specific hypothesis), and non-linear (allowing more digression from the main topic or digressions from a point in an argument before it is fully developed). It places more responsibility on the listener to establish relations and decide on a conclusion (Eggington, 1987; Hinds, 1987; Hinds, 1990; Connor, 1996). Middle Eastern cultures reflect other differences in rhetoric, as the comment from Charlene indicates. These differences in thinking and writing styles affect how ESL students from other cultures read English argumentative prose. They have different expectations when they read and write academic text. Nevertheless, as Zamel (1997) argues, these cultural differences are generalizations and we should not assume that ESL students are incapable of learning critical thinking or will be oppressed by it.

In light of the fact that 64% of the students still agreed that the exercise was helpful for learning editing and revision skills, and 73% agreed that it was helpful for learning to write better, I think it is important to emphasize the value of the text, as a teaching tool. Teaching students to relate to the Western style of critical thinking and to be able to read and write arguments is often important for the success of ESL students in the Western university system. This factor is already acknowledged in the design of some of the ESL textbooks which were reviewed in section 2.2.3.7.

With regard to this specific topic, I found examples of ESL students writing on it and other religious topics, in Fox (1994) and Allison (1995), as I reviewed the literature. Furthermore, one of the program's own textbooks, *Critical Reading & Writing for Advanced Students,* includes an essay by Eward Kennedy: "Tolerance and Truth in America" (Unfortunately it is part of the 6th not the 7th level curriculum). The essay discusses religion in the context of separation of church and state. This is an important cultural distinction between Western cultures and fundamentalist Islamic cultures or other cultures where pluralistic religious beliefs are not tolerated. It is a distinction which needs to be clarified for some ESL students, who do not understand that in Western cultures faith, beliefs, political agendas and theories are both questioned and defended using an academic style of writing that is common to philosophy and theory building. This type of questioning is common place and is considered basic to sustaining a democratic society (Brookfield, 1987). This type of information can be used as background introduction to the text to prepare students for both the topic and the text-type.

I acknowledge that it can be problematic for a teacher to have students who do not engage with a task because of culture shock or culturally related issues. Nevertheless, the way that culture interacts with language organization and structure can not always be avoided. I also do not question that the instructor was teaching the students about the rhetorical and structural organization of argumentative text. I would simply emphasize that the structure of English argumentation is not simple (cf. section 3.2.4.6). There are different ways of analyzing a text-type that reveal different relational aspects of writing which must be mastered for argumentative text. Research, such as Connor (1987), and writing textbooks, such as Moore (1993), demonstrate the complexity of learning to think critically and write effective arguments. This is an area of writing which is difficult even for native speakers, but ESL students who intend to compete with well educated native speakers in the Western university system will not benefit from trying to rationalize away the expectations. Furthermore, based on the advanced level of the class, it would seem ill-advised to shelter ESL students from this aspect of Western university culture.

Consequently, I am inclined to emphasize that the students' difficulty with the text rests at least partially in the abstract relations involved in the grammatical expression of the text-type and the hypothetical nature of the context, which is consistent with a Western style of argumentation or open debate (Tudor, 1996). As was mentioned previously, some of the students commented directly on the difficulty of the grammatical level and the sophistication of the text. Two of the students also reported learning the *if...then* logical pattern for argumentation for the first time through this exercise. Other evidence which supports this conclusion came from the types of errors made on the task. I noted that some students failed to use the subjunctive form of the verbs, where it would have been appropriate. The purpose of the subjunctive is to indicate the speaker's disbelief or statements of unreal conditions (i.e., If God *were* good, He *would* do this...). They often did not select appropriate modal expressions or emphatics. In terms of syntactic maturity, they also did not recognize where to use a variety of relative pronouns. Some of the more obvious grammatical expressions of argumentative style appear to be very challenging to this group of students, because their correct choices were most often locally determined prepositions and co-ordinating conjunctions that required no understanding of the grammatical features that signalled the text-type.

However, a similar problem with the level of the rational gap cloze tasks was already identified in the preliminary field testing based on two other sample texts, Exercises 3 and 4. Both of these texts were descriptive narratives rather than arguments. They had perhaps even more complex vocabulary and at least a similar level of complexity in sentence structure. The fact that all three of the samples for the rational gap cloze task were too difficult (having been developed with undergraduate level reading materials) indicates to me that to achieve appropriate sequencing, when moving from a recognition task to a partial production task, the choice of text should clearly be within the ESL students' instructional reading level and even near to the independent reading level of the majority of the class, in order to avoid creating a task that stimulates frustration.

Evaluation of reading levels typically involves three possible classifications for each individual reader: independent, instructional, and frustration reading levels (Allison, Assink, Cummings, Gordon, & Graving, 1995; Forgan & Mangrum II, 1989). Reading material is considered to be at a student's independent reading level, when that person has comprehension difficulty with no more than five words per page (personal communication, Darlene Eerkes, M.Ed.). Instructional and frustration reading levels for texts have been gaged using standard fixed-ratio deletion cloze tasks based on a sample. If students perform between 40% and 60%, then the text is at their instructional reading level. If the students score below 40%, the text is too hard. It is at their frustration reading level. If students score over 60%, the material is too easy and is likely well within their independent reading level.

However, these scores can not be directly transfered to assessment of relational processing cloze tasks without adjustment. This is because a relational processing task is a discourse-based manifestation of linguistic (primary language) competence manifested through a secondary language skill, in this case, reading. Achievement of linguistic competence in developmental settings has traditionally been indicated by 90% accuracy on grammatical forms in an obligatory context (Fowler, Gelman, & Gleitman, 1994; Ingram, 1989). For the rational option cloze tasks, an accuracy rate of 90% or higher would be indicative of native-speaker-like competence at an independent reading level. However, 70% to 90% accuracy would likely still indicate that the text is at the student's instructional reading level. Below 70% accuracy is possibly indicative of at risk performance (Caswell, 1997). Although the relational processing gap cloze task (which Exercise 6 was) is closer to the traditional fixed-ratio cloze design, I think that the 40% to 60% range is too low to be effective for instructional purposes. It is too difficult to follow up on the range of relational-grammatical errors that could occur and the students are not likely to be able to absorb the teaching points involved, unless a pattern of error occurs. Fifty to seventy percent accuracy might indicate that the text is at instructional level for relational processing purposes. Seventy to ninety percent accuracy would be a good indication of independent reading ability on the task. In terms of the lower range (i.e., 40% to 60%), the unanalyzed performance data on Exercise 6 indicates that only three students performed at a level which demonstrated that the text was within their instructional reading range. Using the higher range (i.e., 50% to 70%), the text for Exercise 6 was not at an instructional reading level for any of the students. Furthermore, the teacher's report indicated that, although they corrected the entire task, she focused her follow up teaching for the task on the LOGICAL-condition and LOGICAL-consequence pattern expressed through the *if....then* grammatical connectives.

Further consideration of the ESL language testing literature supports the conclusion that the student's independent reading levels and writing levels may be lower than the general instructional level (which in the 7th level should be at least a grade 12 readability level - *Stone Angel* is commonly used as a grade 12 novel). Alderson (1991) comments on research from language testing which contradicts the inappropriate expectation that advanced language learners will be equally good at individual skill areas, such as grammar, reading, writing, speaking, listening, and vocabulary. The findings of the placement tests, as conveyed to me by the director, and the experiences of the teachers at the participating institution also support the contention that advanced ESL students may have considerably different proficiency in levels in their reading and listening skills, in comparison to writing and speaking skills. This particularly makes sense for students whose previous English training was in a foreign, non-immersion setting.

A recent study by Lee (1995), which evaluated a cloze test as an integrative measure of Korean students' English writing, provides additional insight and support for these findings. It is relevant to this study because of the high percentage of Korean students in the sample. He reports that the reading passages used on the college entrance exams were at a seventh to eighth grade readability level. Consequently, texts at that level were used to develop cloze tasks using passages of 300 words with a fifty gap, 5th word deletion rate. These tasks were found to be too difficult for the students who piloted the materials, even though they were already familiar with the cloze format. The cloze tasks were revised to a thirty gap, 7th word deletion rate for the main field testing. Furthermore, Lee (1995) indicates that the Korean students have very limited experience or in some cases no experience with cloze and essay tests, as the English language training in the country targets reading skills. Fotos (1991) reports a similar finding regarding familiarity with cloze tasks for the Japanese students in her study.

The context of Lee's research differs from this research, in that many of the students here were beyond university entrance level in their own country and possibly had more English language training (cf. 3.4.3.2 - Table 3). The design of the tasks differ in that Lee's cloze tasks were based on a fixed ratio deletion rate and the tasks in this study were based on a rational deletion method. However, the design factors considered and purpose of the test, as another integrative measure of writing skills, indicate that the gap cloze task as a limited production task, needs to be designed at a readability level that is closer to the range of independent reading and writing skills of the ESL students.

Several specific recommendations emerged from my discussions with Charlene, as the field testing teacher, and with the director of the participating institution, as to how to improve the rational gap cloze tasks. Using the current sample texts as a starting point, it was suggested that a readability rating should be obtained for each text, so that future choices can be gaged with reference to these texts. It must be recognized, however, that readability formulas have limitations (Forgan & Mangrum II, 1989). They do not measure the conceptual difficulty of the materials. They do not accurately measure the syntactic difficulty of the materials (i.e., longer sentences are not necessarily more complex), nor do they consider language use factors, such as slang, satire, ambiguity and multiple meanings. They can not replace field testing for determining student interest, a factor which is vital to the success of the materials.

However, there is another design possibility that might allow the gap cloze versions to be used effectively. A rational option cloze and a rational gap cloze version of each text could be constructed and used in tandem as a pair. I discussed the possibility of creating and using these two tasks in tandem, with all three field testing teachers, and they all agreed that it would be a good idea. The rational cloze option task could be used, and then followed up with discussion using the handbook. Students could take a copy of the answer key for further study with the handbook, in preparation for the challenge of attempting the rational gap cloze option of the same text, at a later time.

The rational option cloze and the rational gap cloze versions of the tasks should be tested with native speakers who are university undergraduates, in the first or second year of their programs. It may also be useful to test the native speakers across different majors or disciplines (i.e., humanities, social sciences, physical sciences), to see how they perform with respect to the topics and vocabulary. Testing with native speakers on the tasks and having comparative performance between the option and gap versions of the text would give a better indication of what kind of a drop in performance is normative for native speakers in moving from a recognition cloze task to a limited production cloze task. The pairs of tasks should then be tested with nonnative speakers. The comparative performance of the two groups might verify a baseline of native speaker performance (e.g., 70% to 90% accuracy for independent reading level), against which one could more reasonably assess to what extent nonnative speakers are "at risk" with respect to their relational processing skills. Acceptable, alternate choices produced by native speakers would also assist in the construction of the answer keys for the gap tasks (cf. Garman & Hughes, 1983). Once this type of research has been conducted, and necessary adjustments to the tasks had been made, ESL teachers could then use the pair of tasks to teach at the students' instuctional reading level in conjunction with the handbook.

Other changes can also be made in the design to create easier versions of the rational gap cloze exercise, so that the task could be used without a corresponding version based on options. Easier versions of the task may be constructed by lowering the reading level of the text, limiting the range of relational categories that are targeted (i.e., reducing the extent of syntactic and relational intricacy), or placing fewer gaps in the text, farther apart. In fact some combination of these choices might be necessary to arrive at a gap task for relational processing which is still challenging, but does not leave the students so dissatisfied with their performance.

It is also reasonable to consider developing different tasks for testing purposes than teaching purposes, as part of the total package of materials. For testing situations, it would also be advisable to try to find texts whose topics are culturally, and therefore, emotionally, more neutral (Bachman & Palmer, 1996). Topics that are directly related to ESL student experiences in the academic system may be helpful for such purposes.

However, I would emphasize again, that for teaching purposes, working only with ESL-related topics limits the students' learning too much. Impact on learning must also be a consideration. Advocates of the "writing across the curriculum" movement (Zamel, 1991, 1996) emphasize that the relational, organizational aspects of a text-type vary with different cultural perceptions cultivated within specific faculties of the academic community, and that teaching "canned" versions of text-structure does not promote the best writing skills. They also emphasize that ESL teachers can not take all of the responsibility for ESL students' learning to write across the curriculum. Nevertheless, other researchers emphasize that there are still general, contrastive differences in structural patterns and textual use of connectivity that can and should be addressed in ESL programs (Carrell, 1987b; Conner, 1987; 1996). I still believe that the exercises and texts used within the ESL classes that are labelled "English for Academic Purposes" should provide for engagement with authentic text that is representative of a variety of general studies categories within undergraduate programming. It is important to design materials that promote comprehension of English text-types in reading in order to encourage text responsible writing by ESL students (Leki & Carson, 1997; cf. section 2.2.3.6).

As a consequence of the need to engage with authentic text, improvement of some of the exercises for teaching purposes also requires providing a summary of background information to the text, in the "teaching strategies section" of the exercise. The background information would be part of the instructions which the teachers use to orient the students to the text and its context, before they attempt the task. For the students, a copy of this background information could be included with the answer key, as review material. Important connections between the use of specific relations, the organization of the text-type and aspects of background knowledge should also likely be incorporated into the answer keys.

4.2.4 Exercise 7: Biographical Narrative - Revision Task

Exercise 7 is a revision task, which is based on a biographical narrative text-type. Its topic is a summary of key events in the life of an inventor, named Leo Hendrik Baekeland. This task was attempted by students in Bob's 6th level class. It was undertaken as group work for 15 minutes, then corrected it as a class, with Bob leading, for another 15 minutes. Fifteen students gave feedback on the exercise. The descriptive statistics from the students' rating of the exercise on the five point Likert-type scale are presented in Table 9.

Seventy-nine percent of the students agreed that the task was appropriate for the 6th level and 100% of the group agreed that the vocabulary was appropriate to the level, with 29% agreeing strongly. However, there were a couple of comments from the students that the vocabulary was on the easy side. This may also be due, in part, to the simplicity of the

Table 9. Student Response To Exercise 7

Research Question	Questionnaire (No.)	Ratings					
		strongly disagree	disagree	agree	strongly agree	unable to judge	student N
1c - i)	an appropriate task for 6th level (1)	0%	21%	57%	21%	0%	14
	appropriate vocabulary for the 6th level (9)	0%	0%	71%	29%	0%	14
	satisfied with own performance (10)	13%	53%	27%	7%	0%	15
	more of this type of exercise would be useful (11)	0%	20%	60%	20%	0%	14
1c - ii)	new learning of English language connectivity (2)	0%	21%	57%	21%	0%	14
	makes learning grammar more meaningful (7)	0%	33%	47%	13%	7%	15
	needs to be more discussion and explanation (12)	0%	29%	50%	14%	7%	14
1c - iii)	helpful for learning editing skills (4)	7%	7%	40%	47%	0%	15
	helpful for learning revision skills (5)	0%	7%	57%	36%	0%	14
	helpful for learning to write better (6)	0%	13%	47%	40%	0%	15
1c - iv)	enough time given to do this exercise (8)	0%	13%	60%	20%	7%	15
1c - v)	clarity of written instructions (3)	0%	27%	67%	7%	0%	15

sentence structure in the exercise draft, as many logical, coreference and temporal connectives that were in the original had been deleted. Eighty percent of the group indicated that more tasks of this type would be useful. Seventy-nine percent of the students agreed that they had learned some new aspect of English language connectivity through the task. Sixty percent agreed that the task made learning grammar more meaningful; however, some reported through comments that they viewed the task as having very little connection to grammar learning (i.e., traditional sentence-level grammar exercises is likely what was meant). Eighty-seven percent of the students agreed that the task was helpful for learning editing skills, with 47% agreeing strongly; 93% of the group agreed that the task was helpful for learning revision skills, with 36% agreeing strongly; and 87% agreed that it was helpful for learning to write better, with 40% agreeing strongly. It was encouraging to see such a positive response to the task, because it was intended for the 6th level.

The positive response, however, is not related directly to the students' satisfaction with their own performance. Sixty-seven percent of the students reported dissatisfaction with their performance and a number of their comments revealed that, although they found the task difficult to do, they considered it very useful.

> Student #17: I couldn't do it well. Once it is answered it looks easy, but not before. I really enjoy finding the correct way...I think it's great to know how to check this kind of missed words. It's really usefull. This is an excellent way to learn. I think I have to pay more attention to this things. For me it was usefull, not easy. I enjoyed finding my mistakes. I think these are common mistakes we frequently do.
>
> Student #26: It was very difficult for me and there are so many ways to revise. Who can say that is wrong? {This can help ESL students learn editing, revision and writing skills} ...through many exercises. I don't think that I can learn English grammar here. {There needs to be more explanation and discussion, because...} There are lots of ways to revise. I don't know which is better than others. I would like to make an explanation sheet which we can use later.
>
> Student #32: [It] was a good exercise to learn about connectivity, although was difficult for me.
>
> Student #20: This way we can realize what we need to work on more. I think it was a good exercise.

The difficulty that the students express is consistent with the findings in Lee's (1993) study, where the ESL students also found it difficult to construct complex sentences. Lee suggests three reasons for the difficulty: 1) limited composing ability; 2) limited knowledge of conjunctions; and 3) limited ability to judge the grammaticality and naturalness of written text in English.

However, Bob was pleased with his students' performance on the task. He emphasized that he had not used an overhead copy of the answer key. He reported that he had not emphasized it much, because the students had produced alternatives that he thought were suitable:

> I was going to put in on an overhead, but I thought, I can just tell them what the original was. And because they had given me such a variety, I thought maybe there's no point in showing them that. If the original differed significantly from theirs and there was a better way to do it, then I could point it out to them. Other than that, I just kind of accepted what answers they gave me.(Interview Transcript #5 - lines 539-547, edited)

Because I recognize the philosophy of working with and emphasizing the students' own work as much as possible does affect a teacher's choices in how to use the materials, I did not spend much time challenging his judgement on the matter during the interview. It is possible that advanced ESL students may be capable of coming up with alternate revisions that are different from the answer key, but are still effective. I simply commented that it might have been important to point out types of revisions that the students had not produced themselves. Because the task had been done in group work with a variety of options being demonstrated on the board, the student copies that were returned to me do not give a clear picture of what transpired throughout the discussion.

However, for a couple of reasons, it may be important that the students be given access to a visual copy of some form of an acceptable revision, either through a different packaging arrangement or through an overhead. One reason is the request for such information in the previous comment by student #26. I discovered another reason in the copies of the student work which were returned to me. I noted that one student, who deleted unnecessary repetition of words in order to connect the temporal phrase, "on November 14, 1863," into the previous sentence, had also stroked out the connecting preposition "on", which is actually necessary. Similar types of copying or correcting problems were also identified on student copies of Exercise 8.

Difficulty with prepositions was reported as a common problem for Koreans by one of the Korean students during a 6th level group discussion (cf. Choi & Bowerman [1991] on the conceptual incorporation of spatial location and direction of motion concepts with object concepts in Korean lexical items). It defeats the purpose of the instruction about correct connectivity, if the student somehow misses verbal instruction from the teacher about the necessity of keeping the preposition at the head of the phrase when cutting out unnecessary text. The teacher reported writing answers on the board, but it would appear that working through the revisions within 15 minutes may have been too fast a pace for some of the students. The answer key highlights the connectives and would provide a strong visual reinforcement for the general emphasis on connective expressions, even if it does not always coincide with the students' own choices. For this reason, it may be necessary to be sure that the students obtain a copy of some type of feedback which they can review at their own pace.

4.2.5 Exercise 8: Expository Text - Editing Task

All three of the field testing teachers chose to use the editing task, which was based on an expository text about learning styles. A total of 35 students provided feedback on the task: 10 students from Charlene's 7th level class, 16 students from Bob's 6th level class, and 9 students from Crystal's 6th level class. The descriptive statistics from the students' rating of the exercise on the five point Likert-type scale are presented in Table 10.

There was 88% agreement that the task was appropriate for the 6th and 7th level students. The crosstabulation for this variable did not reveal any significant differences between the groups on the task. However, the differences were similar to the pattern on Exercise 5, where Charlene's 7th level group was in total agreement, but Crystal's 6th level group was split between agreement and disagreement. The 7th level group, again, had 100% agreement that the task was appropriate. Bob's 6th level group had 94% agreement that the task was appropriate, while Crystal's 6th level group indicated only 56% agreement, 33% disagreement, and 11% (1 student) unable to judge. Each of the three groups had only one student who indicated strong agreement.

The difference in the 6th level group responses on the editing task, perhaps reflects a difference in ability and attitude between the two groups. When examining the copies of student work for Exercise 1, I sensed that Bob's group had more of the stronger 6th level students than Crystal's group had. This perception was based upon the number of errors in unanalyzed performance data available in the student copies (i.e., how many students in each group had more than eight errors; how many students completed most of the task). However, in their work on the editing task (Exercise 8), I did not sense any obvious difference in performance between the two 6th level groups.

With respect to the appropriateness of the vocabulary, the total group indicated 71% agreement. However, the crosstabulations indicated 100% agreement from the 7th level: 69% agreement and 31% disagreement, with 13% (2 students) disagreeing strongly, from Bob's 6th level group; and 44% agreement and 56% disagreement, from Crystal's 6th level group. Again, though these differences between the two levels on the task are

Table 10. Student Response To Exercise 8

Research Question	Questionnaire (No.)	Ratings					
		strongly disagree	disagree	agree	strongly agree	unable to judge	student N
1c - i)	an appropriate task for 6th/7th level (1)	0%	11%	77%	9%	3%	35
	appropriate vocabulary for the 6th/7th level (9)	6%	23%	71%	0%	0%	35
	satisfied with own performance (10)	9%	39%	46%	0%	6%	33
	more of this type of exercise would be useful (11)	3%	27%	53%	12%	6%	34
1c - ii)	new learning of English language connectivity (2)	6%	20%	69%	3%	3%	35
	makes learning grammar more meaningful (7)	3%	23%	57%	14%	3%	35
	needs to be more discussion and explanation (12)	0%	18%	56%	24%	3%	34
1c - iii)	helpful for learning editing skills (4)	0%	14%	66%	17%	3%	35
	helpful for learning revision skills (5)	0%	11%	74%	11%	3%	35
	helpful for learning to write better (6)	0%	26%	71%	3%	0%	34
1c - iv)	enough time given to do this exercise (8)	3%	15%	71%	12%	0%	34
1c - v)	clarity of written instructions (3)	0%	29%	66%	6%	0%	35

questionable due to the small number of participants, they are representative of the group dynamics in the classroom.

Some members from both Bob and Crystal's groups made specific comments about the vocabulary in the text being inappropriate because it was too "technical" or "psychological". There were no such comments from Charlene's group. I discussed with Charlene, the various backgrounds of the students, and the tension that comes between the expectations set out in the curriculum and the expectations of the students, when the students want "business" language rather than English for "academic" purposes. A variety of her comments through out the interview indicated that, in this particular session, the majority of her students were preparing for further training at either a university or a college, and that made a difference in their response to materials and her response to the curriculum:

> I have seven out of the twelve that were either going to college or university after they finish the 7th level, who are trying to get into full time program -- not an ESL program. If you have nobody who's planning to go on to university or college, you don't focus on the writing as much. Because most of them, then, are here for business purposes and they just want speaking and listening. So you cover the minimum that you're required in the curriculum. (Interview Transcript #3 - lines 44-47; 1100-1105)
>
> We get a lot of business students, and why do they pick university, even though it's academic? Because it's status. You get a bit more prestige by saying I attended English classes with the university rather than going to a private [school]. They all know that there are different levels to the expertise in a private school, but the university has sort of got a stereotype of what they expect. So if they complete a course at the university, they'd get some status, even though all they want is business language. (Interview Transcript #3 - lines 1267-1278)

It is reasonable to note this issue when assessing the students' response to the materials, because there are academic sources for business language, such as the management text used in the creation of Exercise 1. Exercise 8 is an acceptable task according to the requirements of the curriculum. However, in order for the teachers to meet the preferences of the 6th level students, it would have been an advantage to have another task of the same type that had been developed around business or administrative language, as Exercise 1 had been.

I also asked Bob and Crystal if the editing task should contain fewer errors for the 6th level.The authenticity of the task was considered with respect to the types of errors and the requirements for editing. I also discussed with them student expectations about flagging or identifying the errors. However, their response emphasized agreement with the philosophy of developing ESL students' independent ability to evaluate their own work. With regard to the number and types of errors included in the task, Bob stated:

> I didn't feel like it was too many [errors], and I didn't get that sense from them. You see, some of their writing will have this many mistakes in it - maybe even more. So maybe that's what I'm comparing it to, whereas other ones will be able to write this much with only one or two errors.
>
> [As for the type of errors], yes and no. For the most part I'd say yes. But then I have some that do subject-verb agreement quite often. Any type of errors that they're going to have to fix is good practise for them. Word order errors and awkward style language, I'm not sure exercises will help in that, because they're gonna be reading and if they don't pick it up as being an error, then maybe they're just gonna start using that style, even though it's awkward. (Interview Transcript #5 - lines 335-393, edited)

In terms of comparative difficulty, Crystal reported that her 6th level students found the editing task more difficult than the rational option cloze task. Her group complained directly about the errors not being identified, and the type of error on each line and the total number of errors not being indicated. However, in retrospect she thought that there needed to be an change in student expectations:

> The comment was that they found the text, especially in Exercise 8, they found it difficult to understand. But that's not mine, that was their comment. They had problems with the language, and also because it's more open. They don't say how many errors; and so they're looking and they get one, but there might be five, so they don't get all of them. Some of my students have had a great deal of grammar and then others haven't. Their speaking is stronger and they haven't had the grammar base, so you get a real variety [in skill level]. Too many errors? Possibly, there could be fewer. Just because I know they were like, "I didn't catch that one!" And they were just amazed that they didn't have any errors; and then they all asked [about the number and type of errors] and I said, "Oh, that's a good idea!" And then I realized, no, that's completely against the whole theory. But that goes back to what they're familiar with. There's seven subject verb agreement errors. There's six preposition errors.That's the type of grammar exercise they're used to. I explained that there are certain kinds of errors, but they wanted the exact number and what line. (Interview Transcript #4 - lines 119-122; 263-313, edited)

Alderson, et al. (1995) indicates that for editing tests, at the very least, the students should be told the total number of errors in the task. When developing further exercises of this type, I think it would be an appropriate compromise to indicate the number of errors per line. However, I think that the task does not develop the students' ability to make independent judgements, if they are not required to actually recognize the difference between error and correct usage for themselves.

The total group response to the statement "I was satisfied with my performance" was split, with 49% disagreeing and 46% agreeing. The crosstabulations indicated that 67% of the 7th level group was satisfied with their performance, while 53% of Bob's 6th level group and 56% of Crystal's 6th level group were dissatisfied with their performance on the task, with 33% of Crystal's group being strongly dissatisfied.

Seventy-two percent of the students agreed to new learning of English language connectivity through the task; 71% agreed that the exercise makes learning grammar more meaningful; 79% agreed that more discussion with or explanation from the teacher was needed with the task. In terms of relating the exercise to the writing process, 83% agreed that the task was helpful for learning editing skills; 86% agreed that the task was helpful for learning revision skills; and 74% agreed that the task was helpful for learning to write better. Eighty-two percent of the students agreed with the time allotted to do the task.

The student comments on the task revealed differences in their ability to conceptualize about language structure and errors. Some of the students knew what kinds of problems they were looking for, others did not. A few of the students commented on the authenticity of the task, saying that it was what a real editor would have to do. Others indicated that they felt they needed a better base of knowledge in order to be successful with the task. The following comments highlight the contrast:

> Student #38 (7th level): I think it's very helpful to check out ability to use an appropriate word and idiom and expression and grammar and transcient [sic - transition].
>
> Student #3 (6th level): It is too difficult for me. While I was doing this exercise, I knew something wrong. But I couldn't pick exactly what the problems are.

Some of the students indicated very clearly why they felt that the exercise was related to grammar and made learning grammar more meaningful. Others did not necessarily see editing as having a connection to grammar or sense that their learning had been more meaningful. Those who did rate the exercises as being more meaningful, stated their rationale in terms of the usage of grammar in writing extended text or context.

> Student #7: Through these exercises you learn a lot more usages of words that I usually used before for just one kind of sentence.
>
> Student #42: We have to consider all words to find mistakes. It means that we should know grammar correctly.
>
> Student #15: Because ESL students are weak at grammar; even though they already learned grammar, they are not good at adjusting, using [it] in essay.
>
> Student #32: Not really {more meaningful}, some explanation you knew it before and some other grammar rules don't have a good explanation. It is just the way it is.
>
> Student #24: We don't have to spend much time to practise grammar.
>
> Student #5: It's good for practising grammar rules. But it's little bit difficult. I don't [know] whether it is meaningful or not. Preposition is followed just automatically.

4.3 Summary of the Results and Discussion

The results and discussion of the research findings are summarized here according to four classifications: 1) recurrent findings across exercises; 2) findings from open-ended questions; 3) findings that indicate problematic areas in task designs; 4) comparative difficulty; and 5) general comments from the teachers and students.

4.3.1 Recurrent Findings across Exercises

The most positive findings which reoccur across the exercises are ratings on the statements which address the appropriateness of the tasks and their relevance to the writing process. For the four exercises, with the exception of Exercise 6, the students report substantial agreement with the appropriateness of the tasks, with a range 72% to 88% agreement. For those four exercises, the range of agreement was 77% to 87% that the tasks were helpful for learning editing skills, 68% to 93% in agreement that the tasks were helpful for learning revision skills, and 74% to 87% agreement that the tasks were helpful for teaching writing skills. The recurrent findings on these four factors overall indicate approximately 70 to 90% agreement.

The rating of the tasks for new learning of English language connectivity and the ability to make grammar more meaningful were consistently lower, with between approximately 60% to 70% agreement (including Exercise 6). While some of the students who disagreed with new learning of English language connectivity through an exercise expressed that they were already familiar with the grammar points involved, others indicated that they had only had enough time to become aware of a problem and would need practise to achieve learning. In the range of 60 to 70% of the students also consistently agreed that there needed to be more discussion and explanation with the exercises (with the exception of Exercise 6 where only 55% indicated agreement). The student comments indicated a variety of reasons for needing more discussion; but, basically, they wanted more time to analyze why the correct answers were right and others were wrong. All of these ratings, along with a fairly consistent response of approximately 50% or more of the students reporting dissatisfaction with their performance on the tasks, indicate that the exercises are addressing an area of need.

The student response regarding the clarity of the written instructions for the tasks (thesis question 1c - iii) prompted agreement from between approximately 60 to 70% of the students. The 30 to 40% of the students who indicated disagreement frequently wrote comments in addition to their rating and the comments revealed that this statement had not been interpreted as anticipated. A few of the students used this question to provide feedback on the visual appearance of the task, particularly for the rational option cloze task, which had too many cuts or gaps in the structure, making the text hard to read, in their opinion. A few other students, who were in Crystal's class and were using the handbook and answer keys in group work, used this question to respond to the written clarity of the handbook. Other students did voice complaints consistent with the intended interpretation of the statement (i.e., written instructions on the exercise itself). It was suggested that Exercise 6 needed an example in the instructions. For Exercises 1 and 5, because the example was supplied by the teacher, some thought this indicated that the written instructions on the task were not sufficient. On the other hand, some of the students who agreed with the clarity of the instructions also made additional comments that the instructions were easy to understand.

4.3.2 Findings from Open-Ended Questions

There were very few responses from the students to the open ended question asking for comments about the appearance of the task (No. 14 on the questionnaire; thesis question 1c - vi). The responses were split between a couple of negative comments about the rational option cloze and a few positive comments that included the rational option cloze and some of the other exercises. It is not surprizing that a few students did comment on the use of the framing technique in the rational option cloze exercise as affecting the appearance of the task. The frame can be distracting for readers with poorer scanning skills.

There were also very few responses to the open ended question asking students to recommend changes in the tasks designs (research question 1d). Most of the comments reinforced complaints made somewhere else on the questionnaire. For example, complaints about the topic were voiced in relationship to disagreement with the vocabulary level and then repeated as a recommendation for change. In a few cases (approximately 2 to 5 - some of these comments tended to come repeatedly from the same students), the comments suggested making the tasks easier (i.e., fewer gaps, fewer errors to identify). Some of the comments were also positive, indicating that the tasks were fine as they were.

4.3.3 Findings that Indicate Problematic Areas in Task Designs

The most problematic areas for designing the task relate to vocabulary, grammatical complexity, background knowledge, cultural differences, and time estimated for completing the task and providing feedback. The problems will be reviewed with suggestions for improvement.

As the reviewing teachers indicated during the preliminary field testing, the students in the advanced levels vary considerably in their exposure to certain areas of English vocabulary. The mixed results in Exercises 5 and 8 (rational option cloze) with respect to vocabulary indicate that the problem relates to both language exposure and student interest. This problem can be addressed in four ways: 1) providing definitions for some of the key vocabulary used in the task; 2) creating more tasks that encompass a variety of topics, with varying levels of vocabulary; 3) include readability levels on the tasks; and 4) recommend in the teaching strategies that teachers diagnose student ability on the tasks and group students for work on different tasks, rather than expecting all of the students to be able to do the more difficult tasks. Expansion of the materials package should be able to address some of the problem by providing the teachers with more options and readability levels.

The findings with regard to Exercise 6 (rational gap cloze) might appear to be contradictory with respect to the vocabulary problem, as the majority of the students did not report the vocabulary itself to be the source of difficulty with the text, yet some could not establish the context. This response is not unrealistic. Recognizing all the words in a sentence or text and understanding what the sentence or text means holistically are not the same thing. Words have a sphere of usage that involves variation in meaning according to context.

Many of the concerns with Exercise 6 (rational gap cloze) seem to focus on the complex grammar and relational organization of the text. The results from Exercise 6 suggest that a lower readability level is required for independent versions of the task, perhaps a readability level for grade 9 or 10, something closer to the readability level of the unaltered version of the text used in Exercise 7 (revision task). However, finding texts that authentically model argumentation with enough sophistication, at that readability level may be problematic. Creating paired versions of the rational option and rational gap cloze tasks is an alternative that might allow the task to be used at a readability level that is closer to the students' instructional reading level. However, the concept of using paired versions needs to be tested before it is established as part of the packaging of the materials for the next round of field testing.

Feedback from Exercises 5 (rational option cloze) and 6 (rational gap cloze) indicate that, for some students, the background information provided at the beginning of the exercises (i.e., title, author, topic focus) was not sufficient. More background information about the text needs to be provided, at the very least in the teaching strategies section of the teacher's version of the exercises. The findings also support the need for a student version of the exercises, with answer keys, that might also include background information. This packaging possibility will be discussed in more detail with respect to integration of the exercises with the handbook (section 5.3 in chapter 5) and implementation issues (section 5.4 in chapter 5).

Situations where a student refuses to engage with a task due to culture shock are important problems but ones which are difficult to gage. What is offensive to some students is not offensive to others. From a design perspective, it is important to get feedback on the exercise topic from a range of culture groups, so that the teacher can be alerted to the potential reaction of students from those groups. It is unlikely that good samples of argumentative text will avoid issues that may trigger emotional responses. Therefore, the importance of critical thinking skills to academic writing in the Western setting should also be emphasized in the teaching strategies section, where argumentative text types are involved. The teacher ultimately has to make the final judgement as to whether or not to use a particular exercise with the class.

The time constraints for the rational option cloze tasks (Exercises 1 and 5) were too demanding for comfortable performance for many of the ESL students. It is noteworthy from the crosstabulations from Exercise 5, that the majority of the 7th level group was satisfied with the nine minute time limit for the task. For teaching purposes, with texts of a similar length, I would probably recommend a 9 or 10 minute limit for the 7th level group and a 10 to 12 minute limit for the 6th level group. For testing purposes, where comparison to native speaker skill desired, the tighter time limits are still valid (as discussed in section 3.2.4.1). Tighter time limits are important if the teacher wants to be able to assess the automaticity of student processing.

For the rational gap cloze tasks it may be necessary to recommend that teachers emphasize a 10 minute individual pre-reading of the text without attempting answers. The feedback from the students and teacher did not indicate how many of the students actually read through the whole text to try to establish more of the context before attempting the blanks.

For the exercises overall, the teachers in most cases provided for more follow up time, giving feedback to the task, than the teaching strategies suggested. Nevertheless, a good percentage of the students wanted more time for discussion and analysis. Feedback also reinforced my concern regarding the need for more information about the distractors. When I asked Bob if more information about the distractors would be helpful, he responded:

> Yeah, definitely. And usually students want to know, too: Why can't you use this? Why is this not right in this situation? Like, even though I'm always studying grammar ...just in the context of teaching a course, there's always some things I run into that I

> can't answer. ...and I have to say, "Well, I know you can't, but I can't really explain why not." So yeah, it'd be nice to have that. (Interview Transcript #5 - lines 754-760, edited)

4.3.4 Comparative Difficulty of the Exercises

On the basis of comments written on the teachers' report forms and the student exercise questionnaires, it was possible to arrive at a fairly reasonable judgement about the comparative difficulty of these exercises, as they were currently designed. According to Crystal, her 6th level students found the rational option cloze task easier than the editing task. For the two rational option cloze tasks that they attempted, the task which had more difficult vocabulary, a less familiar topic and text-type was more difficult. Charlene reported that her 7th level students found the rational option cloze tasks the easiest, and the rational gap cloze task the hardest. The editing task was medium difficulty, between the other two task types, and was a more familiar type of task. Bob's 6th level group reported more difficulty with the revision task than either the editing task or the rational option cloze task. However, for some of the students who expressed difficulty with the vocabulary in the editing task, it may have been as difficult as the revising task.

In combination, these comparison suggest that the rational option cloze tasks are the easiest. The editing task is the next easiest, providing that the vocabulary level is appropriate. The revision task is more difficult, and the rational gap cloze task is the most difficult. However, if the rational gap cloze tasks were designed at a lower readability level, this ranking might change. The two harder tasks could be created to be equally difficult or in certain cases the rational gap cloze might be easier than the revising task. The vocabulary level and general readability of the text seriously affect the students ability to perform all of the tasks, but have the most influence on the the two tasks where students must produce words or expressions for a number of missing relations.

4.3.5 General Comments

There were a few other general comments from both the teachers and the students that indicated a positive response to the exercises, providing initial support for their suitability for advanced ESL students.

The teachers emphasized the range of ability within the proficiency level and the necessity to be able to diagnose individual needs. The following comment from Bob illustrates the range of ability, particularly with respect to the rational option cloze:

> Well, I'd say this is, probably for at least some of my students, this was quite

> easy for them. I had some that always knew the answer for what it was, and then I had other ones who really had trouble with it. So, I'd say this is appropriate for that level. (Interview Transcript #5 - lines 97-101)

It is important to clarify that the term "always" tends to be used loosely in spoken English. Because I have seen copies of the tasks, I know that none of the students achieved 100% on the tasks, although two or three students from each level were near to the ceiling on the task. Other students made errors on items that should have been easily supplied by redundancy in the text. The tasks revealed a range of ability in all three groups.

There were comments from all of the teachers regarding some of the students' perception of their needs and problems with accurate self-assessment. For example, Bob also commented:

> I know even on their comments, some of them said: "We've done stuff like this before" and "I don't need to do any of this." But some of them even still have trouble with it -- the very ones who say that will have trouble with it. So they still need the practise even though they think they don't. (Interview Transcript #5 - lines 870-879, edited)

The teachers also considered motivation an important factor in student response to the exercises. Crystal stated that the difficulty level of the task may not be the only reason for poor performance:

> I think a lot of them, if they just did the first third [of an exercise], it could be that they just found it too difficult and then they just get discouraged. Or they're just not interested or not motivated. And I think we really have to look at those factors, the motivation, and it's not a reflection on the material. I'm dealing with a lot of people, it's their first time away from home. They're tired and it's cold outside that day. And you know, all those different factors. So it's the same thing, where I can give them a particular assignment in class and some are just keen and then others aren't. So I think that it's probably too difficult or lack in motivation. And the lack of motivation is not a reflection on the material. (Interview Transcript #4 - 717-733, edited)

Many of the general comments from the student discussion groups supported the usefulness of the exercises. They indicate that some of the students did sense a need for more practise in using grammar in context. They valued the exposure to a variety of ways to express concepts and the integrative nature of the tasks. Their comments make a clear connection between the exercises and their writing skills.

A 6th level student whose L1 was Spanish gave the following reasons for needing more practise with the exercises:

> I need practise to memorize the rules. If you see one time, some things that you don't use every day, and then you have to write -- because you write different than how you speak -- so if you have some things that you want to put in a paper, they're difficult because you are used to talk about them, but you are not used to put those ideas in a

> paper. So, if you don't know how and you learn it once, you don't remember. What I'm saying is that I would like to do more of this exercises to keep the idea. Because I feel like, I read the text and I correct the mistakes and I understand that, but it comes in here {points to one ear} and it goes out here {points to the other ear}, because I forget about them, because I don't use them so often. So I think we should do more of this exercises. (Discussion Group - Partial Transcript - partial editing)

Another 6th level student whose L1 was an Asian language commented on the usefulness of the exercises in contrasting correct and incorrect structure:

> I think the exercises was very useful for me, though at the beginning I was quite not familiar with that format. But once I adjusted to the method, I found it's useful, because during the class we seldom had that kind of practise. Usually we wrote our essays or doing our writing....but he tried to give us work to revise, but sometimes we couldn't understand: why did..my sentence was wrong? What's the problem with this? And we still were keep going to make the same errors. But through this kind of exercise, I would know it, ...remember, oh this is wrong. Through this sentence, the structure, I will notice...what is wrong format...what is right format. So I think it is quite useful. (Discussion Group - Partial Transcript - partial editing)

A different Spanish student agreed with the rationale of designing tasks that were integrative and compared these exercises to the more routine sentence-level tasks in other grammar books. She said that the more routine tasks were a waste of time:

> But you know, when you are using the same type [of category] --because I have the other book of grammar -- when you are using it, you get accustomned to it, and blah, blah, blah, and you just answer and answer and answer. But when they start mixing it, that is the time when it start making sense because you have to think about what are you going to write. Because when you are just using "for", four times, for example, for a preposition. You are just thinking that portion is going to be TIME, and I don't think that you get familiar with it. You just blow it. ...It's true,[with these exercises], it's closer to writing. (Discussion Group - Partial Transcript - partial editing)

Another Asian student indicated her desire to write better. She emphasized how the exercises met a need by demonstrating grammar in use:

> And when I write essay or some writing, I found I use same expression again and again and again, because I want to make sure that it's right. I don't want to use the sentence which I am not sure about. So, I just use very easy expression. And, you know, same expression. So, I think, I need the many expressions or how can I use that grammars. I think I have many basic grammar knowledge, but when I write something I don't really use it. Just, I use some very easy, easy sentence. So, I need this exercise how to use grammar, how can I express myself. (Discussion Group - Partial Transcript - partial editing)

The results from the questionnaires, interviews, and discussion sessions indicate a positive response from both teachers and students to the rationale of the exercises as support for the writing process. Their criticism of specific areas of weakness in the sample exercises provide a substantial basis for the improvement and enlargement of the sample of exercises. Both these factors support further development of this portion of the materials package. There were other comments and suggestions from the qualitative data on the exercises that addressed the area of the integration of the exercises with the handbook. Those data are reported in chapter five, which discusses the response to the handbook, the integration of the handbook and the exercises, and recommendations for further implementation.

Chapter 5: Response to the Handbooks

Results, Discussion, and Recommendations

5.1 Introduction

Two versions of the handbook, *An ESL Handbook on Relational Structure,* were developed. The teacher's version was developed first and reviewed during the preliminary field testing. It was then modified and simplified in some respects to create the student version. Section 5.2 reports teacher response to their version of the handbook, with emphasis on the comments from the reviewers who read it quite extensively during the preliminary field testing. Those comments are supplemented with a general summary of the responses from the field testing teachers. Section 5.3 reports on student response to their version of the handbook. Student comments are supplemented with and supported by additional recommendations from the reviewing and field testing teachers, where applicable. It had not been possible to implement all of the recommendations made by the reviewing teachers between the preliminary field test and the main field test, so some of the student comments affirm recommendations made by the reviewing teachers. Section 5.4 describes the degree of integration between the exercises and the handbook achieved during the main field test. It emphasizes the flexibility inherent in the materials and also lays the foundation for a best approach to implementation. Section 5.5 presents recommendations from the teachers and students, that indicate how to better implement the materials in further field testing, with special emphasis on the integration of the handbook with the exercises. Section 5.6 summarizes the response to the handbook.

5.2 Teacher Opinions

The two reviewing teachers responsed to the teacher handbook primarily through interviews. The three field testing teachers wrote comments regarding use of the handbook on their exercise report forms and also discussed it in the interviews. The responses from the teachers provide answers to thesis questions 2b) and 2c):

2b) How do ESL teachers respond to the descriptive framework provided by the relational categories of conceptual structure?

2c) How do ESL teachers respond to relational processing theory as a framework for explaining the systemic characteristics of English language connectivity?

5.2.1 Response of the Reviewing Teachers

Through the reading guide which I constructed for the reviewing teachers, the response to the thesis questions was further guided toward three themes: 1) familiarity; 2) usability; and 3) readability.

5.2.1.1 Familiarity with the theory

The two reviewing readers Gregory and Madeline expressed entirely opposite positions regarding familiarity with the theory. Since Gregory had considerable exposure to discourse studies through his graduate work in comparative literature, that provided a foundation for understanding the categories and the theory of relational structure and processing. He responded fairly positively to the handbook:

> The theory was familiar to me, but in a totally different format, because my background is in comparative literature, my most recent graduate studies. And I tend to look on it as how meaning is embedded in, what I call, the level of the discourse. And I think that's in this too, but from my background I would emphasize everything from the smallest phonemes to the entire discourse. And meaning is embedded at different levels, either in the phoneme, in a sentence, a phrase, a word, or up to a paragraph or entire novel. I think that's close to what you're dealing with here, but from a different point of view. (Interview Transcript #1 - lines 41-59, edited)

When Gregory was asked if he knew of any other handbook for ESL students and teachers that was organized in a similar fashion or provided a focus specifically on relational structure, he answered, "No." However, he thought that some textbooks may have implicitly used a similar approach.

> I've used textbooks, where I think, I suspect, that something like this was followed when the textbook was written; but, no, in education, no, I'm not really familiar with it. As I said, in comparative literature, something like this is very much familiar to me. (Interview Transcript #1 - lines 65-69, edited)

In contrast, Madeline reported that she was not familiar at all with the theory and that made it very difficult for her to relate to:

> No, I did not know any of this theory at all. And relational processing theory, I had never heard of. Now I suspect this is linguistic. And my back ground is education, literature and writing; and as far as I can remember, I've never come across this term. Now maybe I have and it just didn't register. But to me this is quite new. Very new. It was very difficult. Very difficult (laughter) because it was quite new. And I did think that it was written for somebody with strong linguistics background. (Interview Transcript #2 - lines 25-51)

Madeline said that she had primarily been used to using grammatical terms, rather than conceptual terms, when discussing connectivity problems with students. However, she did not consider all of the conceptual terminology to be equally difficult. She stated that she was aware of probably most of the conceptual terms but did not use them herself and had not heard them presented that way in the ESL context.

Because the handbook's large scale organization was developed around conceptual (semantic) categories rather than grammatical categories, I questionned the reviewing teachers, as to the benefits or hindrances of that type of organization. Neither of the teachers saw the different organization as being directly negative, either for the teachers or the students. Gregory commented:

> I didn't see any hindrances, 'cause organizing things conceptually is closer to what students would inherently know. I think this is closer to a natural way of thinking, personally, because grammatical constructs, traditional grammar, is really quite arbitrary. Originally it was based on a certain way of understanding the grammar of the Latin language, and then that was moved to English. The more traditional way of presenting linguistic material, in my opinion, is quite arbitrary. And, I thought that this was much closer to a fairly natural way of thinking. (Interview Transcript #1 - lines 578-588, edited)

Madeline thought that the change in organizational emphasis could be good, so long as it was introduced properly:

> It's just a matter of changing the way you think.Which is good, you know. I don't see it as a problem as long as there's an introduction to the change and you have provided one in the beginning. (Interview Transcript #2 - lines 414-417, edited)

I also questionned each of the reviewers regarding the possibility of having in-service seminars to develop teacher familiarity with the materials. Gregory did not consider in-service training to be necessary, but Madeline thought that it would be a good idea.

5.2.1.2 Usability of the handbook

Gregory indicated that he thought he could use the handbook with his own approach to teaching. He considered the theory to be important and relevant for lesson planning, evaluation, and needs assessment. He viewed the handbook and the entire package as being easy to integrate with a variety of core curriculum materials and as having the flexibility to work well with the curriculum used by the participating institution. However, usefulness quite naturally flows from familiarity and he noted that point when responding. He explained as follows:

> Well, I think these concepts, as I understand them, are really important. And, if instructors had a good knowledge of the book, this way of approaching material, I think it would be very useful in lesson planning. It would also be useful for monitoring and for evaluating the students. And I think our evaluation tends to follow the curriculum. Whatever the curriculum emphasises we look for in our students. I think an approach like this, even with curriculum not written to this framework, a book like this would still be useful in understanding where the student's proficiency level [is]. And I think that for

> lesson planning, activities could be planned based on the assessed needs of the students, and this would be a useful framework for needs assessment.
>
> In our program, we have a certain amount of flexibility with the materials. We don't teach the book. We teach according to a certain curriculum and the books are just there to help with materials -- to help us. Now, we are quite flexible in the way we use our materials, no matter what the intention was of the people who wrote the materials, 'cause we have an over-riding curriculum. So I think that something like your approach could be useful for any material at all. Even material that is written in a more traditional way, than following your format. (Interview Transcript #1 - lines 80- 112, edited)

Madeline's comments on the usability of the handbook presented both negative and positive factors. She emphasized the work load of the average classroom teacher, indicating that she did not think that they really had the time or the motivation to become familiar enough with the material:

> First of all, we're looking at the handbook for teachers. I did struggle through it. I'm not sure the average classroom teacher has the time for the theoretical part. They don't really care. (Laughter.) It doesn't mean that they shouldn't and that it's not important for them. 'Cause so many of the teachers just say to me, just highlight the key ideas. With the stuff that goes on in the classroom there is no time for theory. So, because I'm sitting in this office and I have the time to read it, I could read it; but I'm not sure that the classroom teacher who is teaching the 7th level, who's working 10 hours a day now, would have the time. (Interview Transcript #2 - lines 83-97, edited)

With respect to the descriptive framework for the relational categories, a number of times, Madeline expressed concern about the amount of detail in the handbook. She considered the detail to be too much for both the teachers and the students. However, she viewed the handbook as being useful, in that it provided terms that could identify problems in student writing:

> I see it giving you something to talk about when you look at their writing. I think you need something to talk about, when they have this piece of writing around an idea and it confuses me as a reader. Unless they are getting a term and a reference from the teacher to talk about **why** this is a problem, which **is** important. Students need to know why it doesn't make sense TO YOU. It does make sense to them. But why doesn't it make sense to you? And so, it gives you something to talk about. (Interview Transcript #2 - lines 915-924, edited)

Gregory also made similar comments about using the framework to address problems in student writing. In his review of the materials, he had also given some attention to the use of the descriptive framework of relational categories in the answer keys and the potential for pattern analysis of the students' responses on the exercises. He indicated that for instructors the categories would be very useful for diagnosing individual students, because a teacher cannot predict the exact mix of skills he or she may have to deal with in any one class. Even though the students do fall within a range, there is still a need for diagnostics with each group and the necessity to respond to individual learning needs in areas where students have a knowledge or performance deficit with respect to some skill in the level (e.g., vocabulary, grammar). The analysis available in the answer keys is useful because it can help teachers get a picture of what they are dealing with in terms of individual differences in the class.

The theoretical section emphasizes that relational processing involves a combination of graphic, phonological, semantic and syntactic factors. I wondered if the unit on the minimal distinctions in grapheme-phoneme relations was unnecessary for the more advanced students. When Gregory and Madeline were asked if they found any of the areas of the theory to be more important or useful than other parts for different levels of student ability or proficiency, both of the teachers responded negatively. They emphasized that all of the theory is still important at the advanced levels because the students come in with a mixture of skills. It is both appropriate and beneficial that the theory deals with relational processing as the combination of graphic, phonological, semantic and syntactic factors, because "it's impossible to predict the students" with regard to their strengths or weaknesses (Gregory - Interview Transcript #1 - line 371). Some of the advanced students do have pronunciation difficulties that could affect their spelling, reading and writing skills.

5.2.1.3 Readability of the handbook

The readability level of the handbook is important because it affects the accessibility of the theory. When I questioned the reviewing teachers in regard to the readability, both indicated that the linguistic terminology places somewhat of a barrier to the ease of reading. However, Gregory was generally more positive about the teacher's ability to adjust to the language. His comments were:

> Okay, the book I found quite readable for a teacher, with the exception of the first one or two pages, because it's always the same with a book when you open to the first pages. There's a new language almost and a new jargon, and it would take a while for a teacher to adjust to that, because in my experience most teachers are very busy people, and things have to be fairly easy for them at the beginning. But once a teacher gets past the introduction, I'm sure that the material would be quite useable. (Interview Transcript #1 - lines 166-175, edited)

Madeline seemed to consider the terminology more of a barrier. She emphasized the difficulty of the material for a reader without a linguistic background:

> My concern about readability is that I found that it was difficult, and I felt that the audience was an audience with linguistic background as opposed to teaching background or English literature background. So, readability, I think, was difficult. (Interview Transcript #2 - lines 129-134, edited)

In this sense, the two reviewers' judgements about the readability seem to reflect their familiarity with linguistic theory and discourse theory. Madeline indicated that theoretical section was less familiar and more difficult to read than the section which presented the descriptive framework of relational categories. She thought she had more background knowledge to bring to the descriptive framework than to the theoretical section, and so she thought that perhaps she judged it as being better written, because her background knowledge made it easier to read. However, she also agreed that the reading difficulty was at least partially affected by the format or organization of the writing. The theoretical section was written with a heavier information load in running text, whereas the descriptive framework was broken down into chunks of information. This was one of the areas that I did adjust for the student handbook.

Although Madeline gave a number of positive comments about the handbook, her repeated comments about the difficulty of the material and the amount of detail, inferred a fairly negative response from teachers, who were 'busy, practical professionals' with little regard for theory. While Gregory was not willing to claim that all other teachers would use the handbook and other materials as he might use them, he judged the material useable, even without in-service preparation. The contradictory stances of the initial reviewers reflects fairly accurately the division that exists among ESL teachers in the field, with respect to their comfort level with linguistic approaches to language teaching and their previous training in linguistic theory.

In some respects I found Madeline's comments regarding the readability of the material surprizing, given that she had completed masters level training in ESL (cf. Table 2). I have considerable reading exposure in the primary and secondary linguistic literature and the ESL/applied literature. Many of the terms which were used and introduced in the handbook are taught in 200 or 300 level linguistics classes in university, depending upon the orientation of the department. The writing in the handbook is definitely not technical when compared to the primary linguistic literature and even some of the secondary literature.

5.1.2 Reponse of the Main Field-Testing Teachers

Because of my own concerns from a design standpoint about the lack of full integration between the handbook and the exercises, as stated previously in section 3.2.7, I placed more emphasis in the main field testing on the use of the exercises than use of the handbooks. I required only that the teachers provide a 20 minute introduction to the handbook, to help the students familiarize themselves with it. Consequently, I did not directly question the field testing teachers about the familiarity, usability or readability of the handbook, because I believed that detailed data collection about the exercises was more important. However, information which was congruent with the first two of these themes still emerged either through their written reports or through the way they implemented the materials.

The most obvious response that indicates the useability of the materials was the willingness of the teachers to participate in the main field testing. Although they were aware that the theoretical approach and organization of the material was unfamiliar, all three of the teachers who were teaching at the most advanced levels did consent to use the materials. When they were first approached about participating and they were scanning over the materials, they seemed to identify with the philosophy behind them and voiced direct comments about their usefulness.

The three teachers received copies of the teacher's version of the handbook on September 11th. They began field testing the exercises at various points in October. So they had approximately three weeks to familiarize themselves with their version before the student version was brought into the classroom and distributed to the students. All of the teachers completed the requested introduction to the student version of the handbook, although they chose different points in time to do so. In some aspects their approaches to introducing the students to the organization of the handbook differed. Each of them used some of the strategies or approaches that I was considering including in an introductory lesson, but no one teacher used them all, likely due to the 20 minute suggested time limit for the task. However, inspite of differences in their approaches, their introductions all emphasized the major categories of the natural class system of relations. As they progressed in their implementation of the materials, all three of the teachers commented on lack of familiarity with some of the terminology used in the handbook and the answer keys.

Bob, in particular, commented that at one time he had been more familiar with the terminology. He found some of the explanations difficult to understand and explain to the students. He realized that he could use the grammatical terminology, but was not comfortable using the explanations in the book/answer keys, which focused more directly on the conceptual terms.

On her first exercise, Charlene reported that she was unfamiliar with organizational structure as it was presented in the handbook and was unfamiliar with some of the terminology. However, she emphasized that she saw the value of stressing the "meaning intended", as she already did this in her own teaching approach. In her second report, Charlene indicated that she understood the meaning of relational grammar, but still was finding it difficult to explain the relationships. In her follow up interview, she stressed that it had been more than ten years since she had had linguistic training, and that her previous training had only used the grammatical categories. There had never been any emphasis on conceptual relations.

Crystal also mentioned in one of her reports that she found it difficult to use the language in the handbook to explain problems and tended to substitute her "own language". However, she had her students working quite extensively with the handbook, and it was appropriate that she would try to paraphrase explanations to ensure comprehension, rather than merely repeating the terms used in the handbook.

The variety of ways that the field testing teachers attempted to integrate the handbook with the exercises is presented in section 5.4. As a researcher, I tried not to unduly influence the way the teachers used the handbook or directed their students, as I preferred to see what range of flexibility the materials granted them. The teachers actually went considerably further in their attempts to integrate the handbook with the exercises than the terms of the consent form required. The emphasis in the main field testing was on using the exercises and it was possible to use and answer the exercises at the level of the word only, without using either the conceptual or grammatical descriptions. It was not necessary for the teachers to struggle indefinitely with the terminology of the natural class system in order to get benefit out of the exercises. For that reason, I considered the attempts of the teachers to actually use the terminology, as an indication that they recognized its potential for communicating about student problems in the writing process.

I did not directly question the main field testing teachers about the readability level of the handbook. Although they voiced no direct complaints about the readability of the material, I do expect to be able to improve the readability through further revision. In the interviews, the teachers emphasized their own responsibility and their need to take more time to get familiar with the handbook, rather than emphasizing the difficulty of the materials. Considering the requirements of their own curriculum, which was the priority, I thought that they made very contientious efforts to use the handbook (Details are provided in section 5.4). Nevertheless, they expressed concerns that the student handbooks likely had not been used enough to be judged properly. After the main field test, they voiced several recommendations for implementation of the materials in further field testing. Those recommendations are presented in section 5.5, as they will be better understood after the report in section 5.4, which details how each teacher integrated the handbook with the exercises.

5.3 Student Opinions

During the final week of the session, 31 of the 45 students (69%) filled out a questionnaire on the student version handbook. The data gathered through the questionnaire provide the response to research question 2d):

2d) How do ESL students respond to the preliminary version of the ESL handbook on relational structure?
  i) How appropriate is the language for their reading skill level?
  ii) What are their opinions of the examples?
  iii) How easy or difficult was it for them to access the information in it?
  iv) How do they respond to a conceptual-based rather than grammar-based organization of the material?
  v) How many times did they use it independently?
  vi) In what contexts did they use it?

The student rating of the handbook is presented in section 5.3.1 and interpreted with respect to additional data sources in section 5.3.2.

5.3.1 Student Rating of the Handbook

The descriptive statistics which indicate the student rating of the handbook with respect to research questions 2d - i) through 2d - iv) are presented in Table 11. Two of the 31 questionnaires were returned with only a general comment from the 7th level students who returned them, explaining why they had not used the handbook. Some of the other students did not respond to all of the items on the questionnaire. Consequently, the table includes a sixth category, which indicates "no data", in cases where students did not respond to specific questionnaire items.

Sixty-eight percent of the students agreed that the vocabulary used in the handbook was suitable for their levels and 16% disagreed. Fifty-one percent of the students agreed that the definitions in the handbook were clear, while 26% disagreed. With regard to the examples, 75% of the students agreed that the examples were clear and 10% disagreed; yet only 65% of the students agreed that the examples were useful, and 16% indicated that they were unable to judge their usefulness. With respect to the number of examples provided in the handbook, 51% of the students agreed with a statement that there were not enough examples, whereas 23% disagreed with the statement and were satisfied with the number

Table 11. Student Rating for the Handbook

		Ratings											
		strongly disagree		disagree		agree		strongly agree		unable to judge		unmarked (no data)	
Thesis Question	Questionnaire Statements	N	%	N	%	N	%	N	%	N	%	N	%
2d - i)	The vocabulary in this handbook is suitable for 4000 or 4100 level ESL students. (3)	1	3	4	13	18	58	3	10	1	3	4	13
	The definitions in this handbook were clear. (4)	0	0	8	26	15	48	1	3	3	10	4	13
2d - ii)	The examples in this handbook were clear. (5)	0	0	3	10	20	65	3	10	1	3	4	13
	The examples in this handbook were useful. (6)	1	3	1	3	16	52	4	13	5	16	4	13
	There were not enough examples in this handbook. (7)	0	0	7	23	10	32	6	19	4	13	4	13
	The text samples at the end of the natural class sections were helpful. (9)	0	0	1	3	11	35	3	10	12	39	4	13
2d - iii)	It was easy to find the information that I needed when I used the handbook. (8)	3	10	10	32	10	32	0	0	6	19	2	6
2d - iv)	A handbook that is organized by conceptual structure is better than a handbook organized by grammatical categories. (10)	1	3	8	26	10	32	1	3	8	26	4	13

of examples. For the text samples included at the end of each natural class section, 45% of the students agreed that they were helpful, whereas 39% indicated that they were unable to judge their helpfulness. The high rating (39%) of 'unable to judge' is not surprizing. None of the teachers did an exercise with the text samples in the handbook, so a number of students, who had not reviewed the handbook thoroughly, were unaware of them. In response to a statement about ease of access to information in the handbook, 32% of the students agreed that it was easy to find information, 42% disagreed, and another 19% indicated that they were unable to judge that feature of the handbook. Student comments that accompanied their judgements about ease of access to the information indicated that they were unfamiliar with a book that was organized by conceptual categories in comparison to syntactic categories. When asked to indicate directly whether organization by conceptual structure is better than organization by grammatical categories, 35% of the students agreed that the conceptual organization was better, 29% disagreed, and 26% were unable to judge.

5.3.2 Interpreting the Rating: Triangulation of Data Types and Sources

There were other factors that the teachers considered important in order to determine the realiability of the student rating of the handbook and to understand the rationale behind the rating. For example, Gregory indicated that most of the students likely would not be able to learn the concepts in the handbook independently. Charlene and Crystal emphasized that for some students passing the TOEFL was their frame of reference for learning grammar, rather than the use of grammar in the writing context. Madeline warned that ESL students tend to overestimate their reading ability. Although the student comments that accompanied their ratings were expected to be informative, it was necessary to gather other data that would help interpret the rating of the handbook. These data were gathered through additional questions on the handbook questionnaire, through interaction with the students in discussion groups, and through statements gathered from the field testing teachers during interviews. On the questionnaire, the ESL students were questioned about their independent use of the handbook, the circumstances in which they used it, their experience with handbooks of various types, their approach to reading the handbook, and their use of the handbook index.

One of the results of the ratings that needs to be explained is the high frequency of the category "unable to judge". In Table 11, this category ranges from 3% to 39% of the response on various questions. These ratings are reasonable given the fact that some of the students did not use the handbook with the exercises and they did not make extensive use of it independently. The amount of independent use and the circumstances of handbook use (answers to research questions 2d - v, vi) are reported in Tables 12 and 13.

I emphasized to the students during my classroom visits or group discussions, that I needed them to be honest about how much they had actually used the handbook when they filled out the questionnaire. I shared with them my own experiences as a second language student and the time that it took for me to familiarize myself with a larger and more complex grammar handbook, when I had been used to using a different handbook. This type of interaction may have been one reason why the students did not hesitate to indicate areas where they thought they were unable to make a judgement and why some students did not fill out the questionnaire at all. Some of the students were actually quite apologetic about their lack of attention to the handbook.

From those 31 students (69% of the sample) who did respond to the handbook questionnaire, 45% indicated that they never used the handbook independently (cf. Table 12). However, it should be remembered that 39% of those who responded did use the handbook in relationship to the exercises (cf. Table 13). Some of those who did not use the handbook independently did use it with the exercises, and in doing so, they may very easily have referred to it up to 10 times or more, depending on the number of errors they had to correct and how willing they were to use the handbook. Another 42% of the respondents indicated that they used the handbook independently from 1 to 5 times (c.f. Table 12). The majority of these students (39%) indicated that they read sections of the handbook because of their personal interest. Only 13% of the respondents (N = 4) indicated that they used the handbook independently in the range of 6 to 10 times throughout the term. The 13 indications of use of the handbook for decisions about their own writing, revision and editing, or peer-revision and editing came from eight students.

Overall, independent usage of the handbook was very low. However, from my own experiences as a second language student, I would consider use of a new handbook about five times within a session to be normal, particularly if the students had other handbooks they were already familiar with. This lack of independent usage was in fact anticipated. In the preliminary field testing, Gregory had advised that the students would require support to become familiar with the framework and that the teacher should actually test the students

Table 12. Independent Use of the Handbook

Frequency of Independent Use	N	% of Response
0 times	14	45
1 to 5 times	13	42
6 to 10 times	4	13
11 to 15 times	0	0
16 to 20 times	0	0
more than 20 times	0	0
Total	31	100

Note. Response to #1 on questionnaire.
Does not include use of the handbook with the exercises.

Table 13. Circumstances Of Handbook Use

Circumstance	N	% of Response
I used the handbook only when the teacher did exercises related to it.	12	39
I read sections of the handbook because of my personal interest.	12	39
I used the handbook when making writing decisions for initial drafts on my writing assignments.	2	6
I used the handbook when making revisions to my writing.	2	6
I used the handbook when editing final drafts of my writing.	4	13
I used the handbook in peer-revision situations.	1	3
I used the handbook in peer-editing situtations.	1	3
Other (Came late, examined it after receiving copy from teacher)	1	3
Unmarked (no response)	2	6

Note. Response to #2 of questionnaire. Students may respond to more than one category.

to see how well they have mastered the concepts. His comments were:

> Okay, in my experience, at teaching at the 7th level, the students would have to have this explained to them carefully by the teacher. And in most cases when I explain things, I also go through this procedure with the students and help them the first time, 'til they became familiar with it.
>
> {It's important to have the teacher go over the} concepts and any necessary vocabulary and even to test the students on it, to be sure they really understand it well. I never let the students move on to difficult topics until I've taught them and had a lot of feedback from them on it, so that I know that they are very fluent with these issues. I never, never trust a student when they say they understand. That's a recipie for disaster in ESL. (Interview Transcript #1 - Lines 130-135; 315 - 326, edited)

This type of comment has relevance for the difference in rating between the suitability of the vocabulary and the clarity of the definitions. The definitions in the handbook introduce the relational approach to analyzing structure. The material teaches a mode of analysis. It is informational writing, not narrative writing. Gregory emphasized that ESL students are very capable of learning a relational style of analysis, but they need support until they are familiar with it (Interview Transcript #1 - lines 287-340). He warned that ESL students tend not to persist in their reading if the vocabulary level is too difficult and that the student version should be written so that they do not need to refer to a dictionary to use it. He also recommended a minimum of two examples to illustrate each concept, as students who did not understand one example might understand the other. Use of multiple examples would increase the likelihood that all of the students would be able to grasp the concept. This comment was made in the context of other comments that emphasized the considerable diversity of ESL students at advanced levels with regard to vocabulary knowledge. From my perspective as a designer, I thought that what is actually needed is at least one example per word or word-form per relational concept, due to the ambiguity of specific relational words.

Some of the students commented directly, that either an explanation from the teacher or the examples that accompanied the definitions helped them to understand the vocabulary in the definitions. Other students reported that certain definitions were easier to understand than others. The students who were successful at using the handbook independently demonstrated good problem solving skills. When they were having trouble understanding a definition, they persisted in their reading and went on to the examples to help them understand a definition. They reported using this type of strategy in the comments that accompanied their ratings of the definitions and examples.

From the 31 respondents who returned the handbook questionnaire, 52% of the students (N =16) reported themselves as being familiar with many other types of reference books (dictionaries, grammar books, handbooks on idiomatic expressions, etc.), 22% of the students (N = 7) indicated that they had experience with a few other reference books, and 10% (N = 3) reported that they were only familiar with a dictionary. The other 16% of the students reported either 'no use of handbooks' (3%; N = 1) or supplied no response to the question (13%; N= 4). Some of the students were obviously more familiar than others with the ways that information can be located in a reference book, as 13% (N = 4) indicated that they used the index *often* and 42% (N = 13) indicated that they used it *sometimes,* whereas the other 45% of the students never used the index.

The data regarding student familiarity with other handbooks are consistent with the student feedback regarding preference for organization by conceptual or grammatical categories. Many of these ESL students were already familiar with other grammar books, and they had expectations that this handbook should be similar. From various comments, both verbal and written, it was apparent that some of the students expected either that the handbook would cover more vocabulary, like a dictionary, or provide more coverage on the lexical grammatical categories, like a regular grammar book. However, other students accepted the handbook as it was, recognizing that it had a specific focus. Charlene's 7th level class made inquiries about grammar and writing handbooks for native speakers, so the use of handbooks (and presentation of some samples) was one of the topics in the group discussion held with the entire class. However, the handbook is not a typical grammar and was never intended to serve that function. Although the explanations must begin with sentence-level examples, the intent of the work is not to focus on sentence-level grammar in the traditional sense. The handbook, in combination with the exercises, is being designed to explain relational structure and to help the ESL student understand how different grammatical categories may express relational structure within a text-type.

One student, who had actually rated the handbook fairly negatively and who disagreed with the statement that organization by conceptual structure is better, qualified the negative responses with comments that fit with the theme of familiarity:

> This is a good try, but it need time be accepted to student. Until now this kind of book is unfamiliar for E.S.L. student, because [sic - so] it is difficult to find something. However, someday, this kind of book will be popular in the world. (partial edit).

The lack of familiarity with the organizational style of the handbook, coupled with little experience in using an index, may have been the reason why a number of the students were having difficulty finding what they wanted in it. I also discovered through the group discussion with students from Crystal's class, who were using the handbook with the exercises, that one student did not know how to relate the coding in the answer key to the coding in the index. The same font type was used for major categories and subcategories in both the answer key and the index. The answer key indicates 'MAJOR CATEGORY - subcategory', but the index uses primarily a 'subcategory - MAJOR CATEGORY' organization. The latter organization was chosen for the index because some of the subcategory terms are more familiar to the students and teachers, and closer to the specific meaning of individual relational words. However, one of the students indicated that she did not think to break the terms apart and search the index by the subcategory and that she did not read the introductory section about use of the index, which explained the two-part label. I thought that it would be a minor problem-solving skill to deal with the major and minor categories, given the use of the font type. However, this information suggests that an instructional guide should be prepared, either for the teachers, or as part of the student handbook, to show the students how the organization of the answer keys relates to the organization of the manual.

I also discovered that some of the students had not been able to sort out the pattern of organization for the subcategories, as the numbering system only highlighted the natural class divisions. The subcategories had been organized in alphabetical order within each natural class division and this fact was mentioned in the overview to section 3 of the handbook, but had not been included in the introduction, section 1. The reviewing teachers, who read extensively in the handbook, found the structure quite redundant. However, for Crystal's students, who took the approach of working from the answer keys to the handbook, in class group work, the switch to an alphabetical organization for the subcategories was not obvious. (Other grammar handbooks do use a mix of numeric and alphabetical strategies. e.g., Lederer, 1969) I had intended to address the combined use of numbering and alphabetical organization in the handbook, in an introductory lesson for the teachers; but, for the reasons mentioned in section 3.2.7, an introductory lesson was never prepared. This factor about the handbook organization should have been included in the introductory section as well as the overview of section 3. It would also seem to be beneficial to create a diagram which points out the features of the handbook organization, based on a sample page, with the types of headers and rationale for the organization explained. This type of visual guide would also be helpful when explaining the relationship of the answer key organization to the handbook organization (Lederer, 1969 provides an example of this type of heuristic device).

Another factor that affected the student response to the rationale of the handbook organization was the TOEFL preparation class. It affected the response in two ways. The first influence of the TOEFL program was on student perception of the organization of the handbook. The second influence of the TOEFL was time pressure, because a number of the students were taking the TOEFL preparation class during the same session as their intensive ESL courses. The effect of TOEFL was not only brought up by the teachers, it was mentioned by students in the 7th level during my initial visit when gaining consent, during the final class discussion, and on the handbook report forms.

The TOEFL preparation course emphasizes one correct answer to a question, based on grammatical rules. Generally speaking, TOEFL preparation courses are not taught with an emphasis on grammar usage in context, and the overall approach to grammar is reputed to be fragmented (Alderson & Hamp-Lyons, 1996).[16] However, an appropriate TOEFL score is very important for ESL student placement in university programs. For some advanced ESL students, therefore, the TOEFL preparation course, not classroom exercises, is the standard for appropriate and relevant grammar teaching, even though the course is not designed to help them with using the grammar they know when they write. Some of these students found the organization of the handbook unusual, unfamiliar and difficult because it begins with the type of relation and gives several grammatical ways to express that relation, depending upon what one means and how one wishes to express that meaning. Many ESL/EFL students are used to a 'teach to the test' framework that emphasizes one right answer and some of them do not understand the relationship between English grammatical rules and self-expression in a particular context.

For other students, the impact of the TOEFL went beyond attitude about organization. Eleven of the students were trying to complete the requirements of the TOEFL preparation class and an intensive ESL course during the same session. It was such a heavy work load for some of them, that they were either not able or not willing to consider a new handbook. Charlene reported having a student drop out of her intensive day course, due to the weight of the TOEFL preparation course. Both Charlene and Crystal shared the considerable frustration that they experienced with respect to student attitude about the TOEFL. Charlene emphasized that many ESL students do not seem to recognize that there is any relationship between grammar and writing, (or reading and writing)[17] and that the TOEFL preparation format does not help the problem. Both teachers expressed frustrations in trying to explain to some of their students that passing the TOEFL did not mean that they would have the speaking and writing skills to succeed in a regular university program. Their comments suggests that the TOEFL preparation promotes inaccurate self-assessment in some of the students, who assume that, if they just get accepted in a program, success will follow.

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[16] Charlene did mention that the institution's TOEFL preparation teacher did attempt to teach the class interactively. However, she voiced the complaint that the students did not seem to be able to transfer what they learned about grammar in TOEFL preparation (e.g., pronouns) into their writing attempts.

[17] Gregory also mentioned that many ESL students do not seem to understand that reading, writing, speaking and listening are related and that reading is necessary to improve their writing. However, he did not mention any student difficulties in relating grammar teaching and writing.

The effect of 'teaching to the test' is called washback and there has been very little empirical research conducted on the subject. However, in one of the few studies that have been done on washback that deals specifically with TOEFL preparation courses, Alderson and Hamp-Lyons (1996) examine claims about negative washback from the TOEFL. The setting of their research is comparable to that of the particpating institution in this research, and one observed effect of washback is also similar; that is: the ESL students who elect to take a TOEFL preparation class may do so "at the expense of another English course" (p. 293). I had not expected that the TOEFL would appear as a factor in student response to the materials. The ESL literature reviewed in chapter two reports about the tension over grammar teaching and error correction in ESL writing classes, but it largely ignores the overwhelming impact of grammar teaching on the ESL student through TOEFL preparation classes. According to Alderson and Hamp-Lyons (1996), administrators, materials designers and teachers may contribute as much to the problem, as the TOEFL test itself does, because they are not taking the steps to make TOEFL preparation more congruent with what is known about discourse-based communicative teaching.

Consequently, it is a complement to these resource materials that the ESL teachers and students view them as being appropriate supplementary materials for writing classes (i.e., approximately 80% of the students considered the exercises helpful for learning editing, revision and writing skills). Still, obtaining maximum effectiveness with their use in ESL writing classrooms will require a shift in focus from an emphasis on grammar rules to meaningful relations between concepts and grammar usage in context. Some of the feedback from the students regarding the exercises (reported in chapter 4) indicates that not all of them are content with what TOEFL preparation provides in terms of grammar. Some of them recognize that they need to learn to use grammar more effectively in the context of writing. Washback from the TOEFL did create some resistence to this new product for a few of the ESL students, but not for the majority of them. Because the exercises were well received, it is plausible that better integration between the handbook and exercises, and more support from the teachers in terms of an extensive familiarization with the handbook, could improve student response to the handbook significantly.

A comment from an Asian student who attended one of the group discussions corroborates student and teacher opinion, that students view themselves as needing more explanation from the teacher. She emphasized the need for a more extensive introduction to the framework of relations in order for the students to be familiar enough with the handbook to use it comfortably:

> I think we need more introduction or explanation before we begin this work, because I learned about grammar for long times, but this work is different from those kinds of works. They are almost to explain about grammar, and like, in writing, but this is about relation, and I think this is more about the context and using grammar. So this was not familiar with me. So that's the problem. Because I wasn't familiar with this kind of book, so I didn't know how to use it, and I didn't know the words, the vocabulary. So, I need some knowledge about those vocabularies, those kind of technical words. Even though I looked up the answer keys and I found these, I still had problem with understand what the exact meaning [of] these words. (Group Discussion, Partial Transcript - partial editing)

This comment also indicates that the vocabulary level of the handbook warrants further attention. As well, it seems congruent with the lower rating of the handbook definitions, as 40% of the students reported difficulties with vocabulary comprehension or lack of clarity specifically with respect to the definitions.

The rating of the suitability of the vocabulary, which was fairly positive (68%), would actually have to be considered inaccurate, if it were possible to determine that these ESL students overestimated their reading ability. A number of the students did comment on the contrast between the technical vocabulary and the more general vocabulary of the handbook. Some indicated that they were intimidated by the technical vocabulary, whereas others considered it appropriate. To provide more insight into their rating of the handbook, students were asked to indicate their reading approach to the introductory sections of the handbook (i.e., thorough reading, skimming, not reading).

The student feedback on their reading approaches indicated that only 3 to 6% of the students (N = 1; 2 respectively) had thoroughly read through the introduction (section 1) and the overview on relational structure (section 2) independently. Another 42% of the respondents indicated that they had skimmed through these sections, whereas the other 42 to 45% indicated that they had not read these background sections independently at all. Other than the teachers' brief introduction to these sections, they did not receive much attention from the students. This is relevant to the students' comprehension of the definitions in section 3 of the handbook, because the first two sections provide the background information to handle the framework correctly. For example, the relational categories are often defined in terms of the types of nonrelational categories which they join. The students need to be fairly comfortable with the nonrelational terms in order to grasp the definitions, and the nonrelational categories are introduced with examples in section 2 of the handbook. Because the entire framework is unfamiliar, a skimming approach to the handbook is not likely to result in a solid grasp of the overview material that was intended to assist in understanding the definitions. These results are not really particularly suprising or negative, when one considers that the teachers themselves reported lack of familiarity with the framework.

The four students who reported independent use of the handbook, between 6 to 10 times, had also indicated that they read sections of the handbook for their own interest. The most independent users were among the most positive raters of the handbook or were the students who were able to verify that certain parts of the handbook were better developed or easier to read than others. Consequently, it was appropriate to know whether or not those students were among the better readers and writers in their classes or if they were overconfident in their reading and unable to monitor their writing independently. Since the handbook questionnaires were completed by the students before interviews were conducted with the main field testing teachers, the teachers were able to attest to the status of those ESL students. The teachers consistently agreed that the independent users of the student handbook were not just the better readers and writers, but that they were better students overall and more self-directed in their learning. For example, Charlene reported regarding two students in her 7th level class:

> Yeah, well S_____ , he's an independent learner. He mentioned that he used it and referred to it in his writing. I think they get past this, that there must be a formula that I can just plug in. I think they get past the initial stage of learning the grammar just because there must be one right way, and they go on to looking at writing as a form of communication: Now, what do I want to say and how do I want to say it. S_____ and C______ , but they are very motivated students and it seems to me they looked at it on their own and found that they used it, whichever way they felt was beneficial to them. (Interview Transcript #3 - lines 724-733, edited)

One of Crystals' students, who had given excellent feedback on the handbook, had also attended the group discussion. He appeared to have much better reading comprehension on the exercise texts that were too difficult for some of the other students in her 6th level group. She verified the student's ability, as follows:

> And also the fellow you mentioned, who was the one fellow who was at the meeting, him understanding the text. I mean that doesn't surprise me because he understands everything he reads, even the Globe and Mail. (Transcript #4 - lines 747-752, edited)

Bob inquired directly about the student response to the handbook and who had used it independently. When he was given a response form of one his 6th level students, he provided a similar sort of corroboration:

> This is G______. She's a very high level student. Her writing has very few errors in it. She speaks really well. So, she used it then! (Interview Transcript #5 - lines 651-653, edited)

Further discussion with the teachers indicated that good problem solving skills, self-directedness and willingness to persist are all characteristics of the students who were both willing and able to use the handbook independently. In group discussions, I learned that those students who expressed difficulty with handling the resource, when questioned further, did not demonstrate the types of problems solving skills that I noticed in the 7th level students who viewed the handbook in the preliminary field testing situation (e.g., using the index, or the use of context or examples to determine meaning, word analysis skills).

However, a few of the ESL students expressed other complaints about the handbook that clearly indicated examples of definitions that needed simplification or indicated areas where appropriate integration between the exercises and the handbook had not yet been achieved. Other students reported further effects of unfamiliarity, saying that they had trouble knowing which categories applied to their writing. Therefore, a series of modifications are necessary to address these concerns.

The general implications from the results of the handbook questionnaire, taken in combination with the unanalyzed data from student reading performance on the exercises and their feedback on the handbook in discussion groups, suggest a very rough estimate regarding the readability level of the handbook for the ESL students who were involved in the main field testing. The readability of handbook was likely appropriate for independent use by perhaps the top 10% to 15% of the 6th and 7th level ESL students, perhaps more. Some of the students who may have been able to read and use the handbook simply chose not to invest much time to familiarize themselves with it. For about 60% of the class, it is reasonable to interpret that the handbook was at or very near to their instructional reading level. If the field testing situtation had required more use of the handbook and more support from the teachers, many of the students could likely have reached the same level of use with the handbook, as the few students who used it independently. However, for the lower 25 to 30% of the class, it is difficult to determine whether reading skills or lack of motivation may have been the determining factor (as Crystal mentioned in her interview). The readability level of handbook may have been above their instructional reading level or they simply were not interested in expending any energy on a handbook which was not required for the course.

In spite of the weaknesses of the handbook, some of the students clearly connected with the rationale behind its design: providing explanation for the relational meaning behind grammar and using grammar to express organizational meaning in extended text. Appreciation for the attempt to provide explanations was very clearly and emphatically voiced by a Spanish student in one of the 6th level discussion groups. She stated her frustration with teacher feedback that pointed out errors but gave no explanation for the error or direction in how to correct it:

> Well, you have an explanation and now you know how to correct your mistakes. Because if they just mark, like, "Here, you have to change this." or whatever do you say. Well, FOR ME it makes sense. And, well, in my case, I have to think, like, long time to write a sentence, sometimes, because I want that it makes the sense and to express whatever I want. And sometimes it is just because of the preposition or whatever, that "Oh, this needs change...adjective error." And they are not explaining it, the reason. It's, like, it's, okay, WRONG, but what can I do? (Group Discussion, Partial Transcript, partial editing)

This comment from the student perspective is almost a mirror image of Madeline's comment about the handbook enhancing the teachers the ability to comment about the students' writing and explain why it does not make sense to them (section 5.1.1.2). It provides a precise conceptualization for the rationale behind the resource materials as a package. This type of response, as well as other positive comments, supports further revision and expansion of the handbook.

5.4 Integration of the Student Handbook with the Exercises

In chapter 3, it was explained that the exercises were actually designed to be stepping stones that allow ESL teachers and students to familiarize themselves with the categories and the system of analysis presented in the handbook, for the purpose of eventually being able to use the relational framework to discuss the students' own writing. However, due to the preliminary state of development of the materials and the fact that the teachers had very little time to familiarize themselves with the framework, I did not have high expectations of integration between the handbook and exercises in this main field test of the materials. Consequently, it is important to emphasize that all of the teachers fulfilled the requirements for participation as they were expressed in the consent forms. Each teacher attempted to use the handbook or vocabulary from the framework in different ways and this variety provided very valuable feedback about how the handbook and the exercises can be integrated in the classroom.

5.4.1 Degree and Type of Integration Achieved

The degree and type of integration achieved varied from teacher to teacher, depending upon their choice of exercises, their methods of providing feedback, and the way in which they chose to support the students in their familiarization with the handbook. This information about teacher integration of the handbook with the exercises has been gathered from their exercises report forms, comments made in interviews, and comments made by the students in group discussions.

5.4.1.1 Charlene's approach to integration

Charlene's approach to integrating the handbook with the exercises targeted the exercise introductions and follow up. She reported using the terminology of relational classes in introducing the exercises, consistently before each exercise. Before they attempted Exercise 1, the students had been previewing the handbook and had received her overview of it. For the other three exercises she used, she reported reviewing the types of relations and connectives that were highlighted in the teaching strategies section as a means of introducing the exercises. She led the students to review briefly the relational categories in the handbook, as a pre-activity which introduced Exercises 5 and 6.

For each exercise, the students first attempted the task individually and then were allowed time to share and discuss in groups. Next, Charlene corrected the exercise with the entire class, providing explanations, based on the answer keys. Finally, she collected the exercises and did an analysis of each student's errors using the answer key and the error pattern analysis sheet. She returned the error analysis sheet to each student, with recommendations that they refer to the particular sections in the handbook, for Exercises 1 and 5, which were the rational option cloze tasks.

At this point, we encountered a procedural difficulty. In order for the error analysis sheets to be of much benefit to the students, they needed their copy of the exercise. However, I had also requested a copy of the completed exercises, to help further in the design process. I wanted to improve the integration of the handbook with the exercises, in areas where the students were making the most mistakes. Charlene returned the original exercises to me, and for a time I was unaware that copies were not returned to the students. However, given the expense involved in copying and the appearance of the originals, it was realistic that the teachers did not expend any effort in copying the work. In many cases, the students had worked with pencils and then corrected with highlighter pens, and the markings were so light that they would not have copied clearly on a xerox machine.

One of the most significant points of feedback from the group discussion with

Charlene's class was their disappointment that their copies of the task were not returned. They did not attempt to use the error analysis sheets for further study with the handbook because they wanted and needed the exercise copy. The student who directly voiced the complaint about the exercise copies said that they also would have liked to have received a copy of the answer key or some kind of key notes, for follow up on the exercises. He repeated the request in writing on the general comments section of the handbook questionnaire:

> If there was an answer key and explanation of the answer, it would be much helpful to find the uniqueness and preciousness [sic - value] of this book.

Tudor (1996) emphasizes that self-directedness in learning for language students who come from cultures (e.g., Asian) that typically teach to large class sizes often comes in the follow up stages, where students assimilate the material outside of class time. The availability of answers keys and key notes would allow the students to review the exercises on their own. A few of the students indicated that they had not really learned anything new because they were only introduced to a problem through the exercises and did not have time to master it. With a more normal integration of the exercises and the handbooks, this problem would not emerge.

There was, however, a very important benefit for the research and for Charlene as a teacher in the time that she invested in analyzing the students' answers. Because of this effort, during informal conversations, she volunteered information about the relationship between her students' performance on the exercises and their writing ability. I asked her to repeat these insights during her interview. She explained the relationship as follows:

> Yeah, [they are the better writers] and they are the better students, too. The ones that you didn't have to tell them, you know, you should be doing this. They are the ones who are looking at ways to improve for whatever reason, because they have a very clear purpose of why they are there, why they're taking that course. I would say that the ones that didn't do well were the poorer writers in the class, very poor speakers, very poor writers, generally. They just don't have any concept at all how our grammar is structured. They don't seem to understand that nouns are not adjectives and they're not verbs and they just can't be used interchangeably in any place at all. One student, he uses anything anywhere, as long as it's the correct root, he'll use anything anywhere. (Interview Transcript #3 - lines 735-764, edited)

This insight is important because ESL student performance on sentence-level exercises generally does not give any indication of how well the student can write. Crystal and Bob had not used the pattern analysis sheets, so they were not as confident about the relationship. They reported that their stronger writers and the strongest students overall did seem to do well on the exercises. However, they were more uncertain about those who performed poorly on the exercises. Bob thought that he had not spent enough time going over the exercises to give a really accurate report. Crystal indicated that motivation might have been more of a factor than the students' actual abilities, in some cases. However, she also thought that the exercises provided her with a good indication of those students who had not had much grammar teaching in their previous English classes.

5.4.1.2 Bob's approach to integration

Bob reported that he had his students refer to the handbook during their correction of Exercise 8, particularly for explanations on three lines of the exercise. I questioned his students in their group discussion about the ease of finding information in the handbook, and they responded that it was not difficult because their teacher had already looked up the page numbers in advance. It was obvious that this level of support made the students feel very comfortable with the handbook.

I discussed Bob's approach with him during his interview, and he verified that in his preparation for the exercise, he had taken the time to find the page numbers for the explanations provided on the answer key. He agreed that having the page numbers included on answer keys is important for saving time in class and that it saves teacher preparation time, as well. I would label Bob's approach as "key point emphasis." He chose ahead of time, specific points that he wanted to emphasize from the exercise. This is a very valid and realistic approach to integrating the handbooks with the exercises, especially if it is repeated consistently through out a session or term. As familiarity with the handbook increases, a teacher could draw upon it to clarify problems in reading and writing from the core curricular materials as well.

Information about including page numbers was appreciated, because the lack of page numbers for the handbook on the answer keys was one of the remaining weakness in the materials that I had identified previous to the main field testing. Yet it had not been identified by the reviewing teachers as a problem or an area for improvement. Eventually, the students and teachers do need to be able to handle the handbook without such supports, in order to use the framework to discuss problems in the students' writing. However, indicating the page numbers on the exercise answer keys will faciliate the familiarization process and integration of the handbook with the exercises for both teachers and students, when the framework is first being introduced.

5.4.1.3 Crystal's approach to integration

Crystal chose to have her students correct their exercises in small groups. She gave each group a copy of the answer key. They corrected their answers and spent time looking up information in the handbook about the relational category of those items where mistakes had been made. She circulated through the classroom trying to help the students find information in the handbook. She had high expectations for use of the handbook and was concerned that the students tended to discuss extensively and sometimes heatedly about some of the distractors. She tried to encourage them to turn to the handbook sooner:

> No, [they weren't intimidated by the answer keys.] They worked really well together actually in groups. They'd have one person reading the answers because they did it in groups, and, actually I found that really, when they were correcting it, that seemed to be the best part of the exercise. They really got into that. And saying, "Now why was that wrong?" Now, they didn't use the handbooks enough. I'd always be saying, "Well, look it up. Look at other examples." But they often wouldn't do that. They'd say, "Well, why is that wrong, and then they'd discuss it. Well, I think it should be this." and then I'd think, use the handbook.
>
> Well, we would, then at the end after each group corrected it, then I would point out, usually not that many, about three or four errors that everybody consistently made, and we would just discuss it and look at the examples together in the handbook and see what seemed to be a common error, and remind them they were doing that particular error, usually in their writing and we just discussed it that way.(Interview Transcript #4 - lines 473-512, edited)

As the designer, I was not surprised to find that the students were primarily concerned with the distractors. The relational descriptions will only be useful if they are taught in relationship to use of the relational words as a part of phrases in specific contexts. I would have expected that reference to the handbook between four to ten times in group work would be normal.

The exercise questionnaires from Crystal's students and group discussion with some of them provided valuable information about the existing degree of integration between the exercises and the handbook achieved for this preliminary version of the handbook. The students verified that they were spending considerable time trying to understand why the distractors were wrong. They wanted more explanation in the answer keys about the distractors. As mentioned previously, one student also voiced some concerns about learning how to work effectively from the answer key to the handbook. Nevertheless, other students were finding explanations and examples that were beginning to clarify distinctions in meaning that had been problems for them for some time and had actually resulted in fossilized language behaviour, as this student reported:

> I found that sometimes one example doesn't make clear. I have a problem with

> "into" -- in both exercises, I have the same problem, the same mistake. When I read the handbook I was clear, okay. The next exercise, again, [I made] that mistake, and I think that it happens because there are only few examples or sometimes [I] need the answer to why NOT use the word, I am used to [using]. Because sometimes, you know that you are wrong, but you don't realize why you are wrong. So that is why you keep using the other word, because you didn't know why you are wrong. That's the problem I have: Why? If they don't tell me why, then I think it's not that bad. (Discussion Group - Partial Transcript - partial editing)

So, that particular student found a handbook example to be helpful, but needed more examples and more practise to change engrained habits of incorrect usage. He readily admitted that he had ignored previous native speaker corrections about his wrong usage because they could not explain why the expression was wrong. This type of feedback indicates that for some students explanations that clarify the loss of meaning are necessary, or they will not change in their use of certain expressions.

On a less positive note, however, two or three students reported disappointment with some of the examples provided in the handbook because they were already familiar to them and did not provide any further insight into the errors made in the context of the exercise. This information reinforced my concerns about the state of integration between the handbook and the exercises, as this type of weaknesses in the materials had already been identified before the main fielf testing. However, it is the students' actual experience of encountering these weaknesses, when using the answer keys and the handbooks in a fairly independent manner, which justifies continued development of the materials and further improvements.

5.4.2 Implications for the Formative Evaluation

The main implication of these findings is that further development of the materials should provide a more self-directed approach to student learning, and that this should be reflected in the writing, printing and packaging of the materials. The students, as well as the teachers, should receive copies of the answer keys and the pattern analysis sheets. If certain teachers or students are not comfortable with peer correction, they do not have to use the answer keys for group work; but then, the individual students would still have the answer keys for follow up and personal study outside of the class. This conclusion is further supported by a recommendation for packaging made by one of the teachers. Charlene suggested a packaging that would allow the student version of the handbook and exercises to be marketed for both independent study and classroom use:

> Some books, some grammar textbooks, come with pages that you rip out. The answers are in the back and you rip them out, and then as you cover that exercise you

> give it to the students. So, you could have a section where you have the answer keys and the teacher kept them until you did that, because there's a 90% chance that the students will just think about it. They'll just look at the answer, rather than actually try to figure [it] out.
>
> So, if you're going to have independent study, I think you need to include the answers, but you could go both ways. Instead of having the coil binding, you have a pocket in the back, where if the teacher is going to use them in class, rather than independent study, you could remove the answers and then just hand them out as they go along. If you just mean it for independent study, you need the answer keys to go right in the book. (Interview Transcript #3 - lines 822-829; 844-85, edited)

Although most of the students did not use the handbook independently within the time frame of this field test, the teachers and some of the students expressed the expectation that the materials could be more effective than the present findings indicate. In order to achieve better results, they had specific recommendations for implementation of the materials in the next round of field testing.

5.5 Recommendations for Further Implementation

With the R & D process, there is often a concern that a better developed set of materials might have produced better results, whereas a poorly developed product may have produced poor results, even though the underlying principles and ideas behind it were sound (Borg & Gall, 1989). With respect to this particular product, and the handbook in particular, the teachers were concerned that the product had not received enough attention to be properly tested because it had not been used as a required part of the curriculum. A similar concern was voiced in one of the student discussion sessions. Sections 5.5.1 and 5.5.2 report the participants concerns and recommendations about effective implementation of the materials.

5.5.1 Teacher Recommendations

The teachers voiced a general concern that they needed better preparation to work more effectively with the exercises and the handbook. Charlene and Crystal both indicated that they would prefer some sort of inservice training, whereas Bob thought that he just needed to spend more time familiarizing himself with the handbook. However, all of the teachers reported that they could not justify spending more time to familiarize themselves with the framework or spending more time presenting it to the students without it being formally recognized as a part of the official curriculum of the program.

Charlene clearly indicated that she would have used the materials more and used them differently, if they had been part of the program:

> If it had been part of the program, I would have used it differently. I think we would have, -- actually, it would have been less independent study, 'cuz the way I think that they understood what you said, was to use it independently. And I didn't, aside from doing the exercises in the class and reviewing what the different categories were, I didn't spend a lot of time referring to it. But if it was part of the program, I think I would have incorporated it more. I would have been more familiar with it for one thing, and then I would have referred to it more in other writings. And certainly I wouldn't have then taken their exercises and kept them. We might have even spent more time. They would analyse it and would have found out **why** it was wrong. And I think that would have been of more benefit to them than having me analyse it; but if you've got two hours already spent on it and it's not part of the program. -- There's so much else to cover. I just didn't feel I could give a whole day to it; say to give it 4 hours. And then, if you're doing more of the exercises, you become more familiar with it too. So I can see using it in class and I think it would work better if it was part of the program; then, in the comments, it would have been more successful. It would have shown better if it was actually incorporated, because you would just refer to it more. It's a resource but you also do things that reinforce everything that you have done in using it in the classroom. (Interview Transcript #3- lines 1284-1339, edited)

Crystal acknowledged that the framework had the potential to be used in making comments on student papers. She thought that it needed a much more thorough introduction for both the teacher and the students, to be used in that way:

> Yeah, I could [use it to comment on their papers], it has so much potential that way. I can definitely see myself using that. But I need the time and I think the students need the time. And I'm trying to figure out how you would incorporate that into the class. I think it's really useful, I'm just trying to think, I think you just need -- Like I felt that I was always, okay, introducing it to them, and then doing the exercises. And I felt that we needed an entire class where we're looking at it, doing exercises you know, reviewing and then once they got that foundation, then I could use it and make comments, ...so that it would be more of a teaching tool. You could explain it and test them, see if they understood it, and then go over it again. And yeah, it would just be a bit more concrete that way, if we were testing it. Looking at the fact that, you know, teaching this course for me, it was my first time, teaching the 6th level. It would have been really difficult to go into it that thoroughly, but in an ideal situation that would be the way to go.
>
> I think there has to be the time for workshops so that you become familiar with the terms. Because it's new for me too, so that's what I felt like. It was new for me but I felt kind of badly because I didn't have the time to really get into it, you know. To study it in detail and so forth. So I would need that time in a workshop and so forth. And then incorporate it into the course and use it. Use it as the, -- like, we're not teaching grammar directly, but use it in our writing, and then they would become familiar with the terms. I mean also using it as in a program, too would work, so that they've had it from one class to another. Right? That would be ideal. These are the terms we use and this is the way we edit our work, and these are the comments we make, and so forth. (Interview Transcript #4 - lines 201- 256, edited)

When I questioned Bob about achieving more effective use of the manual, he questioned if I meant that the handbook should be a required textbook. I responded that the institution's type of curriculum gave them, as teachers, considerable flexibility in how they used even the required materials. Then I probed for more detail, as to what would constitute really effective use, if the handbook were to be integrated to the point where the terms in the framework could be used to annotate students' writing. Bob responded:

> Well, they would all have to read the handbook part of it, like the first part, before the exercises. So students would have to read through it, and probably [there] would have to be some discussion about the different categories and subcategories. And question and answer type things, if they don't understand it. Maybe even going through it one section at a time. So the students definitely need that background to read through all that. And I think, it needs to be more regular too. Like, I kind of did it sporadically just because it wasn't a required part of the course. That's why it was kind of here, I did some, and then, wait a couple of weeks and do some more. But yeah, more effective use would be more regular. Like, say, once a week or twice a week or whatever, -- read something out of the book and do an exercise on one day and read something another day, just more regular. (Interview Transcript #5 lines 694-708, edited)

So, the idea that the materials needed to be treated as part of the established curriculum and used more regularily was recommended consistently from all three of the main field testing teachers. Recommendations for more systematic use of the materials are not unusual. It follows quite naturally from the organization of the material. There is a section with background information and the relational category section of the handbook has ten subsections, some of which could be combined or omitted within a ten week session. Furthermore, there are precedents in similar types of supplementary materials (e.g., Lane & Lange, 1993), which indicate that they are designed to be used consistently and systematically within a course, even though they are not the main reading-writing text.

5.5.2 Student Recommendations

One of the ESL students also expressed the concern that student feedback on the product should be assessed with the recognition that some of the students simply did not take materials very seriously, if they were not a part of the required curriculum. One of the Asian students commented:

> I think, that, probably, most of the students, they know that this is not a part of the formal content of this class, so we don't really very serious -- to look at that [the handbook]. And also, probably, because each day we have many different materials that we have to finish. So, actually, we really don't have much time to look at that. I think it's because, it's kind of, not put in the format [sic - curriculum], formal class. But even though we only did twice exercise, it's my personal opinion -- I think through the exercise, then we discuss, then we look at that book, that's really very useful. (Group Discussion - Partial Transcript - partial edit)

The demands of the curriculum of the intensive ESL courses at the participating institution were quite rigorous, for both the students and the teachers. The handbook presented another hundred pages of material beyond these requirements. Only the most independent, advanced students were prepared to try to familiarize themselves with it and use it, without extensive teacher support. The students knew that they had to return the handbook at the end of the session, so their attempts to familiarize themselves with it would not really have a long term benefit. In light of these limitations, the feedback is more positive than might have been expected. From my own experience as a second language student, I know that during my first semester with a new German grammar handbook, I only used it about five times. I had another smaller grammar that I was more familiar with, so it took a two or three semesters to begin to use a handbook with a more complex format. The German class where I was required to buy the handbook was at a comparable proficiency level to the classes where these handbooks were field tested. I do think that this is an appropriate level to be encouraging ESL students to buy resources that will help them with their writing in main stream university courses.

5.6 Summary of the Response to the Handbooks

In section 5.6.1, the response to the handbook from the teachers and the students is summarized in terms of the themes of familiarity, usability, and readability. Section 5.6.2 summarizes the modifications to the handbook that were recommended by the teachers in both stages of field testing and verified through the feedback from the student participants.

5.6.1 Summary of the Response: Familiarity, Usability, Readability

For both the teachers and the students, lack of familiarity was the main barrier to effective use of the handbook. Some of the meta-linguistic vocabulary for the framework for relational structure and the grammatical categories was unfamiliar, as well as the type of organization that resulted from using the relational categories rather than grammatical categories as the organizing principle for the handbook. Nevertheless, both the teachers and a number of the students identified readily with the rationale for the handbook and the total package of materials. They voiced expectations, that the package could be very useful, particularly if it were fully integrated with the curriculum and used on a more regular basis within a session. The fact that the best students across the three classes were able to work with the handbook independently suggests that the student version was written at or near to the instructional reading level of most of the students in the class. Because there has been positive feedback regarding the usefulness of the materials, further steps need to be taken to improve the introduction to the handbook and readability level of the student version. It would be best to have the readability level closer to the independent reading level of the majority of the advanced students, so that they can familiarize themselves with the handbook more readily. Modifications can also be made to the teacher's version, to make the theory more accessible and to provide more structure for the familiarization process.

5.6.2 Summary of the Necessary Modifications

The feedback from both teachers and students concurred with the researcher/designer's concerns regarding features of handbook where modifications are required. The following series of modifications are necessary to prepare the student handbook for further field testing and classroom use:

1) Further simplification of the vocabulary is necessary to bring the handbook closer to a readability level for independent reading for more students. The definitions for the natural class system of relations needs more attention. The clarification of the relational terms should probably be written using related words more redundantly (e.g., abilitative = ability, able, capable, capacity).

2) It is necessary to work systematically between the exercise answer keys and the handbook, to determine where the handbook lacks examples that explain and support correct choices for the exercises. At present, the handbook does not have enough examples about how English word structure interacts with relations and the formation of phrase structures. More attention to this area is needed. This type of careful integration should also apply to any new exercises created.

3) A section should be added to the handbook, to suggest strategies to help the students use the categories of the relational system to improve their writing, and to revise, and edit. This will require a review of the teacher's theoretical section of the handbook and the reintegration, simplification, and expansion of certain concepts that were deleted from the student version in the main field testing (i.e., Figure 3 - page 18 of

the teacher's version).

4) The introduction to the handbook should use more visual support to clarify the organization of section three (the framework of relational categories) and provide an explanation of how to work from the answer keys to find information quickly.

5) Page numbers to the handbook should be included on at least some of the answer keys for the exercises, in order to speed up familiarization with the handbook and the vocabulary, and to avoid confusion that may arise because of the ambiguity of relational words and word parts.

The teacher's handbook will also be revised to include any of the new introductory information or new examples that are introduced into the student version. However, there are a few other modifications and additions which would improve the quality of the product for the teachers:

1) The information and vocabulary in the theoretical section of the teacher's version is appropriate, but the information load in the text should be lightened, so that new information is introduced more slowly. More examples from different languages should be provided (in the sections on "concepts and words" and "relational morphemes and sphere of usage") to better illustrate the interference problems that ESL students from various language types may experience when learning relational processing skills in English.

2) An introductory lesson and sets of testing materials should be created to help the teachers introduce the handbook and the natural class system of relational categories to the students. The focus of these materials would be familiarization with the handbook terms and familiarization with handbook structure, along with strategies for effective use.

3) The teacher's version should also include some examples of how to use relational categories to annotate student writing.

When these modifications have been completed, in conjunction with the further testing, improvement and development of the exercise manual, the entire package should be at a quality level which would warrant a higher level of integration with regular class materials than was expected in this field testing. More stringent requirements for integration of the exercises and handbooks should also be outlined for the teachers for the next field testing and, if possible, the number of institutions which use the materials should be increased (e.g., 3 institutions). Further research should be conducted to determine what would consistitute appropriate pre-service and in-service training to help prepare teachers to use the package of materials, as it might be possible to create a small video tape session for such purposes.

Chapter 6: Summary and Conclusions

6.1 Introduction

The purpose of this final chapter is twofold: 1) to provide a summary of the research and development project with emphasis on the recommendations for further development and implementation of the materials; and 2) to present implications for further research regarding theoretical issues in ESL research, in second language acquisition research and in adult education research, as well as this specific research and development project.

6.2 Summary of the Research and Development Project

6.2.1 Research Question

The research question, which guided this R & D project in ESL materials design and field testing, was:

> How do ESL teachers and students respond to preliminary versions of resource materials, which are based on relational processing theory and are designed to help instruct ESL students in the skill of English language connectivity, as it pertains to revising and editing in process-oriented ESL composition instruction?

The main research question was then divided into further subquestions according to the types of materials which were designed: a set of sample exercises and a handbook. Consequently, the summary of the participants response to the materials is organized according to 1) their rating of the exercises (section 6.2.4); 2) their rating of teacher and student versions of a handbook (section 6.2.5); and 3) their recommendations for improving the materials and implementing them in further field testing (section 6.2.6).

The definition for the process-approach to writing used in this research is taken from the text, *Reading, Writing, and Learning in ESL - second edition* (Peregoy & Boyle, 1997), which recognizes five interrelated phases to the process: pre-writing, drafting, revising, editing and publishing (p. 186).

6.2.2 Theoretical Foundations: Relational Structure and Processing

The development of this ESL writing resource package was a deliberate attempt to adapt knowledge from a systematic area of linguistic theory and inquiry, so that it would be accessible to and useful for ESL teachers and students. The descriptive foundations for relational processing theory are based on categories from conceptual semantics, with a special emphasis on conceptual relations. These relations are cross-linguistic or universal in nature but have specific manifestations that are influenced by the way that each language encodes concepts into words and word parts. Relational processing theory is the subset of text processing theory that describes and explains how the words and word parts that encode conceptual relations are processed during reading and writing, and contribute to our recognition of text grammar or structure (de Beaugrande, 1980; Jackendoff, 1987; Brown, 1987, 1994; Speelman & Kirsner, 1990; Garman, 1990; Archibald & Libben, 1995; Longacre, 1983, 1996; Berko-Gleason & Bernstein Ratner, 1998). The handbook introduces this theory to ESL teachers and students, providing implications for learning to write, revise and edit in English as second language.

A major portion of the handbook introduces a natural class framework for relational categories, which was developed by the researcher for applied linguistic purposes (Caswell, 1992, 1996, revised). The natural class framework is a synthesis of relational categories organized according to ten natural classes: identificational, thematic, spatial, temporal, manner, logical, psychological, co-reference, social and nonliteral relations (c.f. section 2.3.3.2 for definitions and examples). The synthesis draws extensively on the existing foundation of relational concepts introduced by previous research in conceptual semantics (Jackendoff, 1983, 1987, 1990; Barnwell, 1980; Larson, 1984; Peck, 1984; Crombie, 1985, Halliday & Hasan, 1976). However, it differs from earlier works in three ways: 1) its descriptive comprehensiveness regarding the range of relational categories identified and the range of syntactic categories which are allowed to encode those relations; 2) its attempt to identify natural classes of relations and organize more specific relations with respect to those classes; and 3) its separation of the relational categories from linguistic notational devices that are not conducive to analysis of those relations in extended text samples used for reading, revising and editing exercises in language teaching classes.

6.2.3 Methodology

The general methodological approach was a research and development design that involved both qualitative and descriptive, quantitative data. Emphasis was placed on teacher and student response to the perceived utility (Tessmer & Richey, 1997) of the materials, not measures of performance. The methodology section describes: 1) the participating institution; 2) the product development; 3) the ethics review; 4) an overview of the field testing; 5) demographic information about the participants; and 6) the data gathering instruments and procedures.

6.2.3.1 The participating institution

The participating institution offered an intensive ESL program at seven proficiency levels. The mission statement of the institution emphasized the goal of helping ESL students develop the communication skills necessary to function efficiently and effectively in academic, professional and social contexts. From both my informal interaction with the teachers and their interviews, it was clear that they had considerable familiarity with the process-approach to writing and used it in their teaching. However, the curriculum did not make a strong distinction in terminology between the editing and revising stages. Access to the institution was gained through an interview with the director, who suggested that the resource materials should be developed for the students at the institutions most advanced proficiency levels (the 6th and 7th levels).

6.2.3.2 The product development

A preliminary package of the ESL resource materials was developed. It included the teacher's version of the handbook, *An ESL Handbook on Relational Structure*, and a set of sample exercises entitled, *Text Profiles in English Language Connectivity*. The handbook was designed around an introduction to relational processing theory and a natural class framework for conceptual relations, as summarized in section 6.2.2. Five types of exercises were created for the sample set: 1) a rational option cloze task; 2) a rational gap cloze task; 3) a revision task; 4) an editing task; and 5) a collocations task. The five types were created with either narrative (or narrative-descriptive), argumentative, instructional and/or expository text-type samples, for a total of nine exercise options. For each exercise an answer key was developed that indicated the correct word answer(s), as well as the conceptual relation and syntactic categories involved. The provision of this type of analysis in the answer keys allows teachers and/or students to conduct an error analysis on an exercise to determine whether or not the students have patterns of error in their responses. It also allows the exercises to become a bridge to familiarization with the categories in the handbook so that they may eventually be used to annotate drafts of student writing. Samples of the exercises and answer keys are located in Appendix 2.

6.2.3.3 Ethics review

Upon completion of the preliminary package of materials, a research proposal was submitted to the ethics committee of the Department of Educational Policy Studies at the University of Alberta, and then to the ethics committee of the participating institution. Permission to proceed with the research was granted by both committees.

6.2.3.4 Overview of the field testing

Field testing of the materials then proceeded through two stages: a preliminary field test and a main field test. The participants in the research were ESL teachers and students who were active at the institution from July through November, 1997. The students were at the institution's most advanced proficiency levels, either the 6th or 7th level intensive day classes. They had been placed at those levels either on the basis of the institution's placement exam or the successful completion of the previous proficiency level in the institution's program. Teachers and students all signed consent forms that indicated their voluntary participation in the research. They were free to discontinue participation at any time during the field testing. Participation did not in any way affect the students' grades.

The preliminary field test was conducted with two ESL teachers, Gregory and Madeline (who were holding non-teaching contracts at the participating institution, i.e., curriculum designer, academic assistant), and 5 student volunteers from the 7th level ESL class from the six week summer session. The ESL teachers reviewed the teacher's version of the handbook and provided recommendations that resulted in modifications to the handbook to produce the student version. They also voiced some predictions regarding the suitability of the exercises. Some of the ESL students attempted exercises and gave feedback on them; others reviewed part of the teacher's version of the handbook and made recommendations for adjustments that would be appropriate for a student version.

The student handbook was then prepared for the main field test, based on those recommendations which could be completed in time for the fall session. Remaining weaknesses in the materials were identified. The main field testing was intended to provide a more in depth formative evaluation of the materials, which would verify the strengths and weaknesses of the materials, and would provide further recommendations for development of the materials package.

For the main field test, three classroom teachers, Charlene, Crystal, and Bob, and 47 ESL students were approached regarding participation. All 3 of the teachers and 45 of the students participated in the research. Charlene taught a 7th level class which had 13 student participants; the Bob and Crystal taught the 6th level classes, which included another 34 students, 32 of whom participated in the research. In the second week of the session, copies of the student version of the handbook were distributed to the students. At various points throughout the session, the instructors provided a brief introduction to the handbook and chose exercises to use as supplements to the established curriculum, in accordance with the terms for participation set out in the consent forms. The extent to which use of the handbook was integrated with use of the exercises was left to individual teacher discretion. The intent was not to impose a rigid teaching methodology on the teachers, rather it was to assess how much flexibility the materials offered them, and to gain some understanding of why they chose to use them as they did.

6.2.3.5 Demographic information about the participants

All of the ESL teachers were native speakers of English. They all had previous training that included an education degree, with English language and/or ESL training. The teachers also had extensive teaching experience and had already taught several ESL classes at various levels of proficiency at the participating institution (cf. Table 2, section 3.4.3).

The age of the ESL students who participated ranged from 18 to 35 years old. The average age was 25 years old. The educational background of these students ranged from completion of high school through to completion of graduate degrees. The majority of the students (62%) had either completed an undergraduate degree or were in the process of completing one. The students also reported a wide range of faculties and technical qualifications when indicating their major areas of study. They came from a variety of first languages, with 72% of the group speaking an East Asian language as their mother tongue. The largest 1st language group was Korean (56%) and the second largest group was Spanish speaking (20%). The third largest group was a conglomeration of other Asian languages that comprised 16% of the sample. Other European languages and Middle Eastern languages each contributed another 4% to the sample. The gender distribution of the sample was 40% male and 60% female.

6.2.3.6 Data-gathering instruments and procedures

A variety of data gathering instruments were used in the field testing. The main instruments for recording student responses were two questionnaires, which used a combination of a five point Likert-type rating scale and open ended questions to gather student opinions about the exercises and the student version of the handbook. The exercise questionnaire was piloted during the preliminary field testing; the handbook questionnaire was piloted during the main field testing. The teachers administered the filling out of these forms at appropriate times throughout the main field testing. Discussion groups were also held with student volunteers near to the end of the session and one in-class observation was conducted by the researcher in the 7th level class. Interviews were the primary method of information gathering from the teachers, who later provided member checks on their interview transcripts. The main field testing teachers also filled out report forms about the introduction of the handbook and their use of the exercises in the classroom. Field notes were taken by the researcher to record information about the participating institution, meetings with participants and impressions about the research process. Although the research did not involve gathering and reporting data on student performance, copies of the completed exercises were returned to the researcher, as a means for assessing the effectiveness of the exercise designs and as a means of improving the integration between the handbooks and the exercises in the further development of the materials. (c.f. Table 5. Overview of the Data Collection - section 3.4.4)

6.2.4 Rating of the Exercises

The rating of the exercises begins with the teacher perspectives regarding their suitability and comparative difficulty. Then the student rating of the tasks, on the criteria of appropriateness (general and vocabulary), new learning of connectivity and grammar, helpfulness for learning the writing process, time limits, and clarity of the written instructions, are presented with discussion.

6.2.4.1 Teacher perspectives on the exercises

In the preliminary field testing, Gregory suggested that the exercises were most suited to the students in the 6th level, that they might be too easy and possibly too boring for the 7th level students. He thought that the 7th level students would accept the use of the exercises in a context where they were employed as a method of learning the framework of relational categories, so that the framework and theory could be used to improve their writing. However, Madeline raised concerns about the level of difficulty of the rational gap cloze exercises and the cultural component of the tasks. She attempted one of the rational gap cloze tasks herself and, as a well-educated native speaker, had some difficulties with the task. Unfortunately, she did not keep the data from the attempt, so it was not possible to compare it with the student performance on the task, which had also raised concerns.

In the main field testing, the teachers used 4 out of the 5 exercise-types. The collocations task was not used. However, it was possible to arrive at a fairly reasonable judgement about the comparative difficulty of the other four exercise types, as they were designed in the sample package. According to Crystal, her 6th level students found the rational option cloze task easier than the editing task. For the two rational option cloze tasks that they attempted, the task which had more difficult vocabulary and a less familiar topic and text-type appeared more difficult. Nevertheless, she expressed some concerns that poor performance on the tasks might actually reflect a lack of motivation by some of her students rather than the difficulty of the task. Charlene reported that her 7th level students found the rational option cloze tasks the easiest, and the rational gap cloze task the hardest. The editing task was medium difficulty, between the other two task types, and was a more familiar type of task. Bob's group reported more difficulty with the revision task than either the editing task or the rational option cloze task. However, for those students who expressed difficulty with the vocabulary in the editing task, it may have been as difficult as the revising task.

In combination, these comparisons suggest that the rational option cloze tasks are the easiest. The editing task is the next easiest, providing that the vocabulary level is appropriate. The revision task is more difficult, and the rational gap cloze task is the most difficult. However, if the rational gap cloze tasks were designed at a lower readability level, this ranking might change. The two harder tasks might be equally difficult or in certain cases the rational gap cloze might be easier than the revising task. The vocabulary level and general readability of the text seriously affect the students ability to perform all of the tasks, but have the most significant impact on the the two tasks where students must produce words or expressions for a number of missing relations.

In general, the teachers thought that the tasks are suitable and useful for a writing class because they probe several types of relations and syntactic categories (i.e., intricate, according to Galloway, 1987), and because they use extended text samples of a variety of text-types (i.e., integrative, according to Galloway, 1987). The provision of a variety of tasks organized around recognition, editing and revising skills was beneficial, as teachers could choose a task based on its topic, its text-type, the types of relations tested, its relevance to the writing process, or some combination of those criteria. The teachers also appreciated that the tasks required the students to be more independent in their recognition of correct use of relations and grammar. They considered it appropriate to require advanced students to be more analytical of what they read and write.

In the preliminary field testing, Gregory had predicted that the exercises were useful for diagnostic purposes. The main field testing teachers supported this opinion, indicating that those students who performed well on the exercises, were generally the better writers and better students overall. Crystal thought that performance on the tasks gave a clear indication of which students had had grammar teaching in their previous ESL classes, and which students likely had not received much grammar training. Charlene, in particular, did pattern analyses of her students' performance on the rational cloze tasks they attempted. She found a close relationship between writing skill and performance on the tasks. Those students who did better were the better writers and those who did poorly were the poorer writers, who had very little sense of the structure of English.

The problem with the level for the rational gap cloze task was supported when one of those tasks was used in the 7th level class. About 7 of 11 students (64%) who attempted the task found it excessively difficult and most thought that it was not appropriate to the level. However, some of the best students found it an appropriate challenge. The task elicited a wide range of response on the rating criteria, including both strong agreement and disagreement from certain students. It was still judged to be useful for teaching the writing process, so recommendations were elicited for improvement of the task. Two main suggestions emerged: 1) the readability level of the rational gap cloze tasks can be lowered from advanced ESL students' instructional reading level to reflect their independent reading levels and/or writing levels; and 2) rational option cloze versions of the tasks can be created to use in tandem with rational gap cloze exercises. The latter option would allow students to become exposed to more difficult relational and grammatical usage at their instructional reading level; and then, after further study with the handbook, they could be tested for limited production ability.

6.2.4.2 Student response to the exercises

A summary of the ESL student rating of the exercises is presented through descriptive statistics in Table 14. The summary is based on a response N of 122 because the students provided feedback on each exercise that they attempted, and their rating for any particular criterion was not necessarily the same from exercise to exercise. These statistics are not generalizations, rather they are an attempt to review the feedback of the students from an overall perspective.

The combined ratings (agree/strongly agree and disagree/strongly disagree) on the appropriateness of the task for the proficiency level indicate that, for 78% of the responses, the ESL students agreed that the exercises were appropriate, and for 20% of the responses, they disagreed. In 81% of the responses, the ESL students agreed that the vocabulary was appropriate to their level whereas in 19% of the responses, they disagreed. Indicators that the exercises meet an area of need were the student ratings regarding student satisfaction with their own performance on the exercises and ratings regarding the usefulness of doing more of the exercises. Although 55% of the responses indicated that the students were not

Table 14. Student Response To Exercises - Summary Table

Questionnaire (No.)	Ratings					
	strongly disagree	disagree	agree	strongly agree	unable to judge	N responses
an appropriate task for 6th/7th level (1)	1%	19%	65%	13%	3%	122
appropriate vocabulary for the 6th/7th level (9)	3%	16%	69%	12%	1%	122
satisfied with own performance (10)	7%	48%	40%	2%	4%	121
more of this type of exercise would be useful (11)	3%	18%	63%	13%	5%	120
new learning of English language connectivity (2)	5%	21%	60%	6%	8%	120
makes learning grammar more meaningful (7)	2%	25%	51%	17%	6%	121
needs to be more discussion and explanation (12)	1%	24%	52%	18%	5%	120
helpful for learning editing skills (4)	2%	12%	61%	20%	6%	122
helpful for learning revision skills (5)	0%	9%	66%	16%	9%	121
helpful for learning to write better (6)	1%	15%	64%	17%	4%	121
enough time given to do this exercise (8)	6%	33%	51%	8%	3%	122
clarity of written instructions (3)	2%	29%	54%	13%	3%	122

satisfied with their own performance on the tasks, in 76% of their responses, they agreed that doing more of these exercises would be useful.

The responses with regard to learning were less positive but still encouraging. In 66% of their responses, the ESL students agreed that they had experienced new learning of English language connectivity through the exercises; in 68% of their responses, they agreed that the tasks made learning grammar more meaningful; and in 70% of their responses, they agreed that there needed to be more discussion and explanation with the exercises. The students and the teachers agreed that the exercises present expressions and use of relations that require analysis and discussion. In the rational option cloze tasks, some of the distractor options were very effective, and the students sometimes had difficulty understanding why they were wrong. In some situations, where the students were working with the answer keys and the handbook, they wanted more time for discussion with each other and the teacher to be sure they understood the explanations provided. However, because the materials were not fully integrated with the curriculum, the teachers had to limit the time spent on analysis, discussion and explanation. They discussed with the students only those items that produced the most errors or were the most difficult to understand.

One of the most important findings for the research was the affirmation that the exercises were perceived as being helpful for learning the writing process. For eighty-one percent of the responses, the ESL students agreed that the exercises were helpful for learning editing skills; for 82% of the responses, they agreed that the exercises were helpful for learning revision skills; and for 81% of the responses, they agreed that the exercises were helpful for learning to write better. The reader is reminded that this is a reflection of opinion. Verfication of the opinion would require longitudinal testing of student use and performance on the exercises in correlation with measures of writing improvement.

An interesting feature of these ratings was that most of the students did not tend to discriminate strongly between the tasks according to the task type (i.e., agreement versus disagreement). For example, one might expect that an editing task would rate 'agreement' for helpfulness in teaching editing skills, but 'disagreement' for helpfulness in learning revising or writing skills. Instead, most of the students agreed that the rational cloze tasks and the editing task were helpful for learning editing, revising and writing skills. Those who rated the revision task also agreed that it was helpful for teaching in all three areas of the writing process, but a greater percentage of the group chose the rating of "strong agreement" (i.e., 47% -editing; 36% -revising; 40% writing).

The students were asked to provide justification for their ratings of the tasks, and the comments provided a little insight into some of their reasoning. Some of the students who tended to rank all of the exercise types as useful for all stages of the writing process, justified this by saying that knowledge of relations and grammatical structure is important for all three areas. Those who agreed that the tasks were helpful for learning to write better, expressed appreciation for the exposure to the new expressions and grammar usage in context, which the exercises provided. Only a couple of the students indicated that they were not sure what the distinction between editing and revising was; but this may be more of a factor than the comments indicated. Some EFL students who transfer into Western ESL classes have not received much instruction about the writing process (i.e., as defined in Peregoy & Boyle, 1997) in their home countries (Adipattaranun, 1992; Lee, 1993; Lee, 1995; Tudor, 1996). It should also be remembered that the curriculum of the institution did not stress a strict difference between the two terms, and Bob was the only teacher that used both the revising and the editing task. A few other students grouped editing and revising as similar skills in their comments. They agreed that the tasks were helpful for improvement of those skill areas because they require the recognition of errors. In such cases, writing was considered a separate skill. A few of the students commented that they did not expect transfer to their writing because they did not think they would remember a problem area or an expression when they were trying to write. However, because not all of the ESL students provided comments to justify their ratings, it can not be assumed that these explanations are exhaustive and representative of the reasoning for the entire group.

From a design perspective, it is important to acknowledge that the emphasis on dealing with relational expression in the writing process likely does relate to the fuzzy boundary between revising and editing. It really is not that straight forward to determine when revision ends and editing begins. For example, the revision task involved improving organization and syntactic maturity within and between paragraphs. It did not require major rewriting, addition of large amounts of new information, or major reorganization of the paragraphs. The rewriting involved more local problems. This may also be a reason why the ESL students actually considered the task just as relevant to editing skills as revising skills.

ESL students also provided feedback on the time limits that were set for the exercises. The composite ratings (agree/strongly agree or disagree/strongly disagree) for the exercises in general indicate that, for 59% of the responses, the students agreed that enough time was given to do the exercises, and that, for 39% of the responses, they disagreed with the time constraints. Ratings by individual exercises reveal that overall the students were most dissatisfied with the tight time constraints placed on the rational option cloze tasks (7 to 9 minutes), and a few were dissatisfied with the time limit for the rational gap cloze task. This response is not surprising because the time constraints for the rational option cloze tasks were set in comparison to expected native speaker performance, and ESL students in mainstream university programs report difficulties with speed and efficiency in their language processing (Leki & Carson, 1994, 1997). Complaints about time pressure with these exercises indicate that the lack of automaticity in relational processing occurs not just in the writing context, but also at the recognition stages of reading, in tasks that require the reader to predictively create connections between segments of text.

The final criterion which the ESL students rated was clarity of the written instructions for the exercises. For 67% of the responses, the students agreed that the written instructions were clear, whereas for 31% of the responses, they disagreed. However, through additional student comments, it became clear that a number of the students who responded negatively to this question related the meaning of the words "written instructions" to something other than the written instructions at the top of the exercise. A few students were actually voicing complaints about the appearance of the task (i.e., complaints that there were too many cuts in the structure of the rational option cloze task, making the writing difficult to understand). Others were reporting dissatisfaction with some of the explanations in the handbook (i.e., written instruction = the explanations provided in the handbook). So, the percentages do not entirely reflect a rating of the item that was intended.

Although the ratings of the exercises were generally positive, the negative feedback was assessed carefully in terms of the rationale for the exercises, the priorities of the participating institution's curriculum, and teacher perspectives on student motivation. Areas for improvement involved the vocabulary and topics of the texts, background information, cultural issues related to critical thinking skills, and the suggested time frames for attempting and correcting or discussing the tasks. The recommendations for improving the exercises are summarized in more detail in section 6.2.6.1.

6.2.5 Rating of the Handbook

The rating of the handbook begins with a presentation of the opinions of the two reviewing teachers, regarding familiarity with the theory, and the usability and readability of the handbook. It then continues with a description of how the three main field testing teachers actually integrated the handbook with the exercises, as they worked with the students. The section concludes with the student rating of the handbook.

6.2.5.1 Reviewing teachers' perspectives on the handbook

In the preliminary field testing, the two reviewing teachers were asked to give their opinions of the teacher handbook with respect to: 1) the familiarity of the theory; 2) the usability of the handbook; and 3) the readability of the handbook.

Gregory reported that his previous training in comparative literature had given him some exposure to discourse theory, which presented similar concepts, but not from precisely the same point of view. Madeline found the theory of relational processing totally unfamiliar, but found some of the terminology in the natural class section of relational structure more familiar. According to my experience as a linguistics sessional instructor with the TESOL program at Trinity Western University, this difference in exposure to and comfort level with linguistically based language teaching is common within the field. Not all TESOL programs in North American require the same depth of training in linguistic theory. Some ESL teachers have been trained in applied linguistics programs and others have been trained in education programs. Because linguistic technical language is often adjusted in secondary sources for education students, educators are not always aware of that the theoretical basis for certain theory is linguistic or psycholinguistic (Tyler & Lardiere, 1996). Furthermore, some of the applied linguists who teach TESOL classes may be trained or specialized more in sociolinguistic approaches to text theory rather than a psycholinguistic approach, which was used in this research. TESOL training is not consistent from institution to institution. Finally, a very recent article by Hughes and McCarthy (1998) verifies that the terminology associated with discourse grammar is less familiar than the traditional grammatical terminology for both ESL teachers and students.

Despite the lack of familiarity with relational processing theory, both reviewers expressed expectations that the theory and categories in the handbook could be useful. Gregory considered the handbook as useful for lesson planning, needs assessment and evaluation. He thought that the materials package could be readily integrated with a variety of core curriculum materials. Madeline particularly saw the terminology of the handbook as being very useful for explaining to students why their writing does not always make sense to a reader, even though it makes sense to them. However, she was concerned that the comprehensiveness of the framework presented too much detail for teachers and students.

Both reviewers agreed that the linguistic terminology presented somewhat of a barrier to the readability of the book. However, Gregory was fairly positive, suggesting that once teachers had assimilated the introductory sections, that they would find the framework very useful. Madeline considered the linguistic terminology very difficult and a substantial barrier to familiarization. She thought that teachers would lack the time and motivation to read the handbook, which implied that they would not become familiar enough with it to use it effectively.

Gregory provided several recommendations for adjusting the teacher's version to create a student version. He emphasized that even though the 6th and 7th level students were advanced, they demonstrate considerable differences in their vocabulary knowledge. He recommended that the vocabulary should be simple enough that the students would not be intimidated by it or need to turn to a dictionary to understand it. He also recommended expanding the number of examples (a minimum of two per concept), because this would ensure that more students could grasp the new concepts and terminology through the examples. Although he thought it would be unlikely that the ESL students could learn the framework independently, he did think that they could become familiar with it and learn to use it, given proper instruction from the teachers.

6.2.5.2 Main field testing teachers' use of the handbook

The three teachers who participated in the main field testing chose different ways of integrating the handbook with the exercises. Charlene chose to use the handbook in pre-activity teaching to prepare the 7th level students for the exercises, by teaching and reviewing the natural classes of relations that the students would have to select or produce, depending upon the exercise type. She then did error pattern analyses on the students' rational cloze exercises and submitted the findings to the students for follow up with their handbook. Bob used the handbook for explanation purposes, while correcting the editing exercise with his 6th level students. He led them as a group through specific sections of the handbook that pertained to problematic areas in the exercise. For all three of the exercises they attempted, Crystal had her 6th level students work in groups with the answer keys and the handbook to correct their exercises. She circulated among the groups, encouraging them to use the handbook and helping them overcome difficulties they experienced in working between the answer keys and the handbooks.

All three of the main field testing teachers reported lack of familiarity with some of the terms used in the handbook. They expressed awkwardness in trying to use the terminology without more time for familiarization. In spite of their lack of familiarity, the teachers did judge the handbooks to be useful and thought that the relational framework had potential to be used to annotate student writing. Charlene and Crystal expressed a desire to have in-service training to improve familiarization with the materials, whereas Bob suggested that with more time, he could familiarize himself with the handbook independently. These teachers also expressed concern that the student handbooks had not been used enough to be judged properly and made recommendations for more effective implementation of the handbook in further field testing. Those recommendations are presented in section 6.2.6.3.

6.2.5.3 Student response to the handbook

The ESL student rating of the student version is based on a combination of their independent use of it and their exposure to it in connection with the exercises. Feedback from the handbook questionnaires returned by 31 of the student participants indicated that independent usage of the handbook was low. Forty-five percent of the respondents (N = 14) indicated no independent usage of the handbook; 42% (N = 13) indicated that they used the handbook independently from 1 to 5 times; and 13% (N = 4) indicated that they used the handbook independently from 6 to 10 times. However, the students response to circumstances of handbook use indicate that 39% of the students (N = 12) did use the handbook when the teacher did exercises related to it, although they had not used the handbook independently. Those who used the handbook independently from 1 to 10 times, used it in a variety of circumstances. Thirty-nine percent of the students (N = 12) read sections of the handbook because of their personal interest. A total of eight students indicated that they used it for making writing (N = 2), revising (N = 2) or editing (N = 4) decisions on their own work, or that they used it in peer-revision (N = 1) or peer-editing (N = 1) circumstances.

The ESL students were asked to rate their version of the handbook with regard to statements about its suitability for their reading level (vocabulary & definitions), about the clarity, usefulness and amount of examples provided, the ease of finding information, and the style of organization (first by conceptual then by grammatical categories).

Sixty-eight percent of the students agreed that the vocabulary used in their version was suitable for the 6th and 7th levels and 16% disagreed. This rating indicates that adjustments made to the vocabulary when creating the student version were at least partially successful. Fifty-one percent of the students agreed that the definitions in the handbook were clear, while 26% disagreed and another 23% were unable to judge or provided no data. The difference in the agreement regarding the appropriateness of the general vocabulary level and the clarity of the definitions (68% as compared to 51%) is not entirely unexpected. Adjustments were made primarily in the theoretical section and the terms in the natural class framework had not been altered. Furthermore, second language learners may have general recognition for a wide range of words and yet not be able to ascertain the meaning of their usage in some contexts. The student response to other open ended questions revealed that the majority of their reading in the introductory and theoretical sections of the handbook had been based on skimming, rather than careful reading. This would account for some of their difficulties with the definitions in the framework of natural classes of relations. As well those students who indicated an inability to judge the clarity of the definitions may have thought that they did not spend enough time using the third section of the handbook to rate this criterion honestly.

With regard to the examples, 75% of the students agreed that the examples were clear and 10% disagreed; 65% of the students agreed that the examples were useful, and 16% indicated that they were unable to judge their usefulness. With respect to the number of examples provided in the handbook, 51% of the students agreed with a statement that there were not enough examples, whereas 23% disagreed with the statement and were satisfied with the number of examples. For the text samples included at the end of each natural class section, 45% of the students agreed that they were helpful, whereas 39% indicated that they were unable to judge their helpfulness. These ratings of the text samples in the handbook is not surprizing because none of the teachers did an exercise with them. So, a number of students, who had not reviewed the handbook thoroughly, were unaware of them.

In response to a statement about ease of access to information in the handbook, 32% of the students agreed that it was easy to find information, 42% disagreed, and another 19% indicated that they were unable to judge that feature of the handbook. Student comments that accompanied their judgements about ease of access to the information indicated that they were unfamiliar with a book that was organized by conceptual categories in comparison to syntactic categories. When asked to directly indicate whether organization by conceptual structure is better than organization by grammatical categories, 35% of the students was agreed that the conceptual organization was better, 29% disagreed, and 26% were unable to judge. Although it may seem surprising that 35% agreed that organization by conceptual structure was better, even though 42% did not find it easy to access information in the handbook, there are possible explanations for the discrepancy. One reason is simply that more students were willing to openly disagree with ease of using the handbook than to openly disagree with the conceptual approach. Comments on this factor ranged from expectations that the handbook should be more like a traditional grammar, to appreciation for the focus on meaning, to the need to read the handbook more thoroughly before making a judgement.

The rating of "unable to judge" was used quite frequently by the ESL students, ranging from 3% to 39% of the response on all eight of the criteria used, and the rating was 16% or higher for four of the criteria. A number of the students were conscientious about the fact that they had not spent much time in the handbook, and their ratings and comments reflect this. General comments emerged on the questionnaires and in the group discussions indicating that the students needed more support and direct instruction from the teachers, before they could comfortably use the handbook. The teachers generally agreed that most of the ESL students were not yet as self-directed as most Western students and more time could profitably be spent teaching the students directly from it.

Two other factors that influenced student response were expectations based on familiarity with other handbooks and backwash from the TOEFL preparation class. Student familiarity with other grammar handbooks resulted in a tendency to expect that this handbook should be organized in the same way. The use of a different type of organization was disorienting and some of the students had difficulty finding information in the handbook. Even though teaching in the TESOL field has been changing toward a discourse grammar approach (Hughes & McCarthy, 1998), some ESL students still seem to view grammar as only a sentence level phenomenon. Backwash is the effect of a test on teaching (Alderson & Hamp-Lyons, 1996). Influence from the TOEFL preparation class had some effect on the ESL student response to the materials. It was manifested in two ways: 1) a few of the students who were taking TOEFL classes were too busy to spend any time in the handbook and chose not to give feedback on it; and 2) the TOEFL was brought up in class discussion (at the 7th level) as a more appropriate indicator of the difficulty of sentence level grammatical exercises, than typical classroom exercises. Two of the three field testing teachers (Crystal and Madeline) also commented a few times throughout the field testing about various ways that students referred to TOEFL teaching to justify grammatical choices they had made, which were wrong in a discourse context. Consequently, I questionned all three of the main field testing teachers about the impact of the TOEFL on grammar teaching in the context of writing. The third teacher (Bob) did not report having the same problem with his students.

As far as I know the only other ESL handbook that uses a conceptual structure organization at all is *A Communicative Grammar of English* (Leech and Svartvik, 1975, 1994). However, that grammar uses the conceptual organization only for one section, which is not as comprehensive in its presentation of relations as *An ESL Handbook on Relational Structure*. It's use of relations is limited to the construction of complex sentences. It is not as detailed in its presentation of the use of relations in extended discourse and specific text-types. Leech and Svartvik (1975, 1994) suggest that organization by concepts is valuable for advanced students who want to consider various grammatical options for producing the same concept. Because there is not much of a precedent for using conceptual organization, it is to be expected that familiarity should be a problem. It is important to find ways to make the organization more accessible, rather than rejecting it prematurely.

At the 1996 Georgetown University Round Table on Languages and Linguistics, Tyler and Lardiere (1996) suggested that ESL teachers could benefit from recent linguistic research in conceptual semantics and language acquisition, using Choi and Bowerman (1991) as an example. Part of the significance of this resource materials package is that it provides ESL teachers and students with an entire framework for conceptual relations, based on extended research from the primary literature for conceptual semantics and discourse processing, as well as exercises based on the framework. Although lack of familiarity is a problem for materials that attempt to bring discourse grammar to the ESL classroom, it is important for both teachers and students to understand the benefits of change and to embrace new insights into the function of grammar (Hughes & McCarthy, 1998).

A number of very useful comments were provided by the students in Crystal's class, who had worked most extensively with the handbook in relation to the exercises, and also by the four students who used it most independently (6 to 10 times). These well focused comments stood out in contrast to the response from some of the students that they were unable to judge the usefulness or effectiveness of the examples. One of the ESL students who used the handbook with the exercises expressed difficulties in working between the answer keys and the handbook. Others indicated that they were able to locate explanations in the handbook successfully and that the explanations were helpful, but that more examples would be even better. Some students found the explanations for a particular relation but indicated that the examples in the handbook did not seem to help them understand its use in the context of the exercise. This type of feedback verified the need for better integration between the handbook and the exercises.

Those who were the most successful in using the handbook independently, tended to rate it positively. They were also able to verify the researcher's judgements regarding areas of weakness in the handbook, where more examples were needed or definitions could be improved. The main field testing teachers concurred that those students who had demonstrated ability to use the handbook independently were not just the better readers and writers in the classes, but they were also the most self-directed students. They possessed strong motivation and willingness to persist. The comments which they wrote on the handbook questionnaire demonstrated that they possessed good problem solving strategies in their reading and handling of the handbook. They were also the type of students who highly valued explicit explanations to guide the correction of grammatical errors in their writing drafts. Considering Gregory's prediction that ESL students would need teaching to use the framework, this independent capacity for use of the handbook by the most advanced ESL students suggests that the majority of the students could indeed learn to use the framework, if they were taught and wished to do so. These findings suggest that individual learning styles may be involved in response to products that use linguistic meta-language.

6.2.6 Summary of Recommendations

In general, the feedback from the teachers and students indicated that the resource materials had perceived utility (Tessmer & Richey, 1997) for the writing process. Most of the participants believed that the materials can be useful. Consequently, their comments have been compiled into sets of recommendations for improving the exercises and the handbooks, and for improving implementation of the materials in further field testing.

6.2.6.1 Recommendations for improving the exercises

ESL students in the advanced levels vary considerably in their exposure to certain areas of English vocabulary. The student disagreement regarding the suitability of the vocabulary on specific exercises was accompanied by comments indicating that the problem relates to both language exposure and student interest. The vocabulary problem can be addressed in four ways: 1) providing definitions for some of the key vocabulary used in a task; 2) creating more tasks that encompass a variety of topics, with varying levels of vocabulary, so that the teacher can adjust better to the changing individual needs that affect the classroom dynamics; 3) including readability levels on the tasks; and 4) recommending in the teaching strategies that teachers diagnose student ability on the tasks. After diagnosing student skill with the task types, students could be grouped for work on different tasks according to their ability, rather than expecting all of the students to be able to do the more difficult tasks. Expansion of the materials package should be able to address some of the problem by providing the teachers with more options and readability levels.

The results from the rational gap task suggest that a lower readability level is required for independent versions of the task, perhaps a readability level for grade 9 or 10. It may also be necessary to recommend that teachers and the task instructions emphasize a 10 minute individual pre-reading of the text without attempting answers. The feedback from the participants did not indicate how many of the students actually read through the whole text to try to establish more of the context before attempting the blanks. Poor strategies can result in poor performance. Creating paired versions of the rational option and rational gap cloze tasks is an alternative that might allow the gap task to be used at a readability level that is closer to the students' instructional reading level. However, the concept of using paired versions needs to be tested before it is established as part of the packaging of the materials for the next round of field testing.

Feedback from some of the exercises indicates that, for some students, the background information provided at the beginning of the exercises (i.e., title, author, topic focus) was not sufficient. More background information about the text needs to be provided, at the very least in the teaching strategies section of the teacher's version of the exercises. The findings also support the need for a student version of the exercises, with answer keys, which might also include such background information. The student version of the materials may be packaged in such a way that the teacher is able to distribute the tasks and the answer keys to the class at intervals through out a session. The materials could be stored in a duo-tang as they are accumulated along with the error analysis sheets.

A problem with student disengagement with a task due to culture shock emerged with the use of Exercise 6 (rational gap cloze). The negative response, primarily from one student, which may have influenced a couple of others, was related to a religious/philosophical topic in an argumentative text-type. It also involved lack of experience with Western educational expectations regarding critical thinking skills. This is an important problem, but one which is difficult for a designer to gage precisely, because of the mix of cultures in the ESL classroom. A topic which is offensive to some ESL students is not offensive to others. From a design perspective, it would be an improvement to get feedback on the exercise topics from a range of culture groups, so that the teacher can be alerted to the potential reaction of students from those groups. It is unlikely that good samples of argumentative text will avoid issues that trigger emotional responses. Consequently, the importance of critical thinking skills to academic writing in the Western setting should also be emphasized in the teaching strategies section, where argumentative text types are involved. The teacher may need to spend some time preparing the students, so that they can understand the usefulness of the task; otherwise cultural biases may interfere with their motivation to attempt it. However, if these types of tasks were to be designed for testing purposes, it would be important to try to find the topics which are likely to be the most neutral and most relevant for an ESL audience, so that ESL students from one culture would not have any advantage over any of the other students. If these writing resource materials were integrated systematically with the curriculum for an intensive language class or a writing class, then it would be appropriate for some testing tasks to be included in the resource package. The teacher would ultimately have to make the final judgement as to whether or not to use a particular exercise for teaching or testing with a particular class of students.

The time constraints for the rational option cloze tasks (7 to 9 minutes) were too demanding for comfortable performance for many of these advanced ESL students. For teaching purposes, with texts of a similar length, looser time limits are permissible (9 to 12 minutes). For testing purposes, where comparison to native speaker skill is desired, the tighter time limits are still valid. Suggested time limits for both teaching and testing should be indicated in the teaching strategies sections (cf. section 3.2.4.1 for the rationale behind the time limits).

For the exercises overall, the teachers in most cases provided more follow up time for giving feedback to the task, than the teaching strategies suggested. Since a good percentage of the students wanted more time for discussion and analysis, the amount of time recommended in the teaching strategies for correction and feedback should be increased, by at least fifteen to thirty minutes in order to give a realistic estimate. It is expected that teachers might alter the suggested time frames according to their own priorities and the range of proficiency levels within the class for relational processing, editing, and revising skills.

The teachers and students both report the need for more information about the distractors used in the rational option cloze tasks. The students want to know why certain choices are wrong, as well as why others are right, and the teachers appreciate having that kind of information in the answer key, instead of having to try to come up with the answers "on the spot". As Bob indicated in his interview, even teachers who take take time to study about English grammar occasionally have trouble providing reasons for constraints in certain contexts. This is because teachers likely have more training in traditional, descriptive sentence level approaches to grammar than training in discourse grammar, and pedagogical grammars often fail to address constraints that arise from usage (Hughes & McCarthy, 1998). Thus it is useful service to the teachers, who are busy professionals, to provide information about the distractors. This type of information will be incorporated into the answer keys in further development of the materials. Providing student versions of the answer keys is also advisable, so that ESL students can review the exercises at their own pace and can have a visual copy of the feedback to verify spellings and other features of the task that they may not produce correctly on their work when correcting it in class under time pressure.

6.2.6.2 Recommendations for improving the handbooks

The feedback from both teachers and students identified the same areas of concern that the researcher/designer anticipated would require further improvement. Further modifications to the student handbook will also be included in the teacher handbook; however, some specific additions are required for the teacher's version only.

The following modifications are recommended to prepare the student handbook for further field testing and classroom use. Further simplification of the vocabulary is necessary to bring the handbook closer to a readability level for independent reading for more students. The most attention should be directed at the definitions for the natural class system of relations. The clarification of the relational terms should probably be written using related words more redundantly (e.g., abilitative = ability, able, capable, capacity). The ESL students can also be provided with strategies for decoding word structure which will help overcome the sense of intimidation that arises with some of the vocabulary in the handbook, which uses certain productive English affixes (e.g., suffixes: -tion, -tive, -ual, -ity, -ous; prefixes: -dis; -re).

It is necessary to work systematically between the exercise answer keys and the handbook, to determine where the handbook lacks examples that explain and support correct choices for the exercises. At present, the handbook does not have enough examples about how English word structure interacts with relations and the formation of phrase structures. More attention to this area is needed. This type of careful integration should also apply to any new exercises created.

A section should be added to the handbook, to suggest strategies to help the students use the categories of the relational system to improve their writing, and to revise, and edit. This will require a review of the teacher's theoretical section of the handbook and the reintegration, simplification, and expansion of certain concepts that were deleted from the student version in the main field testing (i.e., Figure 3 - page 18 of the teacher's version).

The introduction to the handbook should use more visual support to clarify the organization of section three (the framework of relational categories) and provide an explanation of how to work from the answer keys to find information quickly. Page numbers to cross-reference with the handbook should be included on at least some of the answer keys for the exercises, in order to speed up familiarization with the handbook and the vocabulary, and to avoid confusion that may arise because of the ambiguity of relational words and word parts.

The teacher's handbook will also be revised to include a few other modifications and additions which would improve the quality of the product for the teachers. The information and vocabulary in the theoretical section of the teacher's version is appropriate, but the information load in the text should be lightened, so that new information is introduced more slowly. Examples need to be set apart from the text. More examples from different languages should be provided (in the sections on "concepts and words" and "relational morphemes and sphere of usage") to better illustrate the interference problems that ESL students from various language types may experience when learning relational processing skills in English (cf. Forth, 1991 for a precedent on the need for English language teachers to have exposure to the linguistic analysis of the structure of other languages in order to be more effective teachers of English). An introductory lesson and sets of testing materials should be created to help the teachers introduce the handbook and the natural class system of relational categories to the students. The focus of these materials would be familiarization with the handbook terms and familiarization with handbook structure, along with strategies for effective use (e.g., student goal setting for improving relational expression in their writing). The teacher's version should also include some examples of how one might use relational categories to annotate student writing.

6.2.6.3 Recommendations for further implementation

The teachers were concerned that the product had not received enough attention to be properly tested because it had not been used as a required part of the curriculum. They also indicated that they needed better preparation to work more effectively with the materials and to become familiar enough with relational categories to use them when annotating student writing. Charlene and Crystal both indicated that they would prefer some sort of inservice training, whereas Bob thought that he just needed to spend more time familiarizing himself with the handbook. However, all of the teachers reported that they could not justify spending more time to familiarize themselves with the framework or justify spending more time to present it to the students without it being formally recognized as a part of the official curriculum of the program. Consequently, they recommended that in further field testing: 1) the materials should be recognized and used as part of the curriculum requirements; 2) more time should be given to introduce the handbook; 3) the sections in it should be covered systematically with the students; and 4) the exercises and handbook should be used more regularly throughout the session.

Recommendations for more systematic use of the materials are not unusual. It follows quite naturally from the organization of the material. There is a section with background information and the relational category section of the handbook has ten subsections, some of which could be combined or omitted within a ten week session. Furthermore, there are precedents in similar types of supplementary materials (e.g., Lane & Lange, 1993), which indicate that they are designed to be used consistently and systematically within a course, even though they are not the main reading-writing text.

Similar concerns about the integration of the materials with the curriculum were voiced from the student perspective in the group discussions and in the comments written on the questionnaires. The students recommended: 1) more practice with these types of exercises; 2) more support from the teachers in becoming familiar with the theory and vocabulary in the handbook; and 3) use of the handbook as a formal part of the curriculum.

These recommendations related to the context-based instructional design factor, which Tessmer & Richey (1997) identify as perceived accountability. In a research context where students and teachers are voluntary participants, no matter how willing they are to be involved with new materials, they will have a stronger accountability to the formal curriculum. The perceived and actual accountability to the materials being field tested is secondary. The focus of their accountability will affect the time and effort that they expend with the new materials, and this should be considered in the formative evaluation of the product. Nevertheless it is a complement to the materials, that a recommendation for integration with the curriculum results from their use under conditions of voluntary participation. The research and development cycle includes the possibility of mutiple field tests of the material, so a move to full integration is not necessarily required. A more cautious approach would be to increase the number of institutions and classes involved in field testing, to increase the number of exercises to be piloted per class, to have the handbook introduced according to a set lesson, and to require instructors to teach a specific number of units from the handbook and to integrate the handbook with the exercises in specific ways.

6.3 Implications for Further Research

In the process of conducting this R & D project, certain ESL research issues were found to be relevant to the design of the materials and the response of ESL teachers and students to them. Implications for further language acquisition research also emerged from the field testing of the materials. Finally, constructs important to adult education research were useful in describing differences in student response to the materials, indicating that ESL students and teachers may have much to contribute to a cross-cultural perspective on adult education theory. These issues and implications for further research will now be summarized. Conclusions and implications regarding further development of the writing resource materials through the R & D process will close the chapter.

6.3.1 ESL Research Issues Relevant to the Study

Two interrelated ESL research issues which were relevant in this research context are achieving contextualized grammar teaching and backwash from the TOEFL preparation course. It became apparent, that for some of the advanced ESL students, the TOEFL preparation courses provide their frame of reference and standard for appropriate approaches to grammar teaching. The ESL teachers, on the other hand, were aware that the fragmented, sentence-level approach to grammar teaching associated with the TOEFL (Alderson & Hamp-Lyonsm 1996) is incongruent with the goal of contextualized grammar teaching (e.g., Hunston, Francis & Manning, 1997; Petrovitz, 1997), and often does not transfer to student writing.[18] Two of the main field testing teachers were quite frustrated with and concerned for ESL students who hold distorted perceptions of the value of their TOEFL scores.

Much of the literature on the use of the writing process in ESL classrooms reviewed for this R & D project actually ignores backwash from the TOEFL and consequently creates an unrealistic picture of the context in which most writing or intensive ESL classes operate. The finding that backwash from the TOEFL affects some advanced ESL student attitudes toward writing resource materials, suggests that further empirical studies on the effects of backwash need to consider this factor among other areas of potential impact, such as instruction and teaching style (Alderson & Hamp-Lyons, 1996).

Until substantial and far-reaching changes are made in the way that preparation for the TOEFL is designed and taught, instructional designers for ESL need to be aware of potential negative influences from the TOEFL, as a contextual influence that affects student response to materials. They should include in their instructional design strategies that might be effective in changing students' perceived utility of materials that are different from those which are currently used to teach some TOEFL preparation courses (e.g., Phillips, 1996a, 1996b).

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[18] I conducted a search in ERIC using the combined textword terms TOEFL, grammar, and writing improvement; and the combination of TOEFL and writing improvement. These searches produced no articles reporting on the impact of TOEFL teaching on writing improvement. Stansfield (1986) reports that the Test of Written English (TWE) was developed because "many TOEFL score users have questioned the validity of this section [i.e., section 2, written expression] as a measure of nonnative speaker's ability to write in the college classroom." (p.4) He cites five studies which reflected the same doubts and were the impetus for the development of the TWE. He cites results from a sample of 638 students (Stansfield 1986 cites Carlson, Bridgeman, Camp and Waanders, 1985), where correlations and factor analyses between writing samples and TOEFL scores (without the TWE) showed a relationship between the writing samples and the TOEFL scores but also indicated that each type of test also measures "something that was not assessed by the other" (p.7). However, Stansfield provides no specific statistics and this relationship is not a measure of writing improvement.

Another ESL issue relevant to this study involves controversy over the value and usefulness of teaching ESL students linguistic meta-language (Krashen, 1981, 1982; Larsen -Freeman, 1995; Sharwood Smith, 1994) which has been a part of the formal grammar instruction and is often discredited by some proponents of the writing process (e.g., Farr & Daniels, 1986). The findings from this research indicate that ESL student response to linguistic meta-language in the handbook varied. While some students were intimidated by these more "technical" words and were not motivated to learn them, others considered the vocabulary an appropriate challenge. Some students thought that the handbook, which used relational terms and dealt with grammar usage and context, went beyond the grammar teaching they had previously received. They wanted more teaching support to become familiar with the meta-linguistic terminology because they did consider it useful. In fact, some of the students consider it very important that native speakers be able to explain to them why certain errors are wrong and were not motivated to change without what they considered to be clear explanations. In other words, the use of meta-language is an issue which is very sensitive to individual learning styles and has consequences for student motivation.

This is not to imply that teachers never provide explanation. However, syntactic explanations express *what* is wrong (e.g., a conjunction is missing); conceptual explanations express *why* something is wrong (e.g., a temporal relation exists between two phrases and should be made explicit so that the reader understands the relationship). Lee (1993) noted that the ESL writers in his study tended to identify errors in surface syntactic terms and their correction of the errors did not introduce the appropriate relationships (e.g., the general conjunction *and* is frequently overused).

Because some ESL teachers and students dislike or are intimidated by linguistic meta-language, it is appropriate to consider whether or not there is any other justification for attempting to change their perceptions of it. One of the major theoretical teaching points regarding relational processing is the factor of ambiguity. Relational words and word parts are highly ambiguous. Many of them can function at different syntactic processing levels in a text and can convey different relations when combined with different content. Therefore, linguistic meta-language provides a way of distinguishing how specific relational words are functioning both syntactically and conceptually in different contexts.

In fact, a consciousness raising task that addressed this factor was designed and included as part of both the teacher and student handbooks. It was designed because ESL students consider relational words and word parts to be easy, because they are not hard to recognize on a superficial level. ESL teachers also consider these to be easy words. But when they need to distinguish the precise meaning of a relational word, they often have difficulty to explain the specific meaning for a student. Although I encouraged the ESL teachers to use the consciousness raising task to help introduce the handbook, in this main field test, they did not. Furthermore, only a couple of the ESL students reported spending time on the task independently. So in further field testing, more emphasis should be placed on determining whether or not the consciousness raising exercise is in fact effective. If it is not, perhaps some other task can be developed to help ESL students realize that there is a broad range of usage to master before they really "know" those simple relational words.

Well-educated native speakers appear to be highly insensitive to their superior ability to disambiguate relations in context. Indeed, text/discourse linguists (e.g., de Beaugrande, 1980) have previously tried to discredit the generative emphasis on ambiguity, arguing that it is inappropriate because the average adult native speaker rarely misprocesses or misinterprets an ambiguous structure in context. More recently researchers acknowledge that ambiguity places additional demands upon reading comprehension because of increased demands on working memory (Miyake, Just & Carpenter, 1994). Furthermore, it is recognized that the disambiguation skills of average adult native speakers can not be uncritically extended to the acquisition of relational processing skills in either a first or a second language (cf. Carr & Curran, 1994; Ellis, 1996).

Because disambiguation skills are a significant factor in language learning (Galloway & Labarca, 1990), Krashen's (1978, 1981, 1989, 1994) discussion of reading and comprehensible input, which emphasizes the provision of language input at one stage above the learners' comprehension level, is valuable but can not be accepted uncritically (cf. Brown, 1987, 1993; Larsen-Freeman, 1995). Krashen himself admits that providing language learners with optimal input is difficult. If advanced ESL students seriously overestimate their reading ability and lack disambiguation skills, their reading will not effectively contribute to writing development in terms of choice of content, and use of vocabulary and structural patterns. Consequently, it may be especially helpful for advanced ESL students to be more aware of the ambiguity problem.

Some of the ESL students who participated in this research indicated awareness that their comprehension of relations was fuzzy and too simplistic. However, one student actually complained about the rational option cloze task, by arguing that in reading it was only necessary to get the gist of the text and that grammar should be limited to sentence level exercises. That type of attitude about reading comprehension will likely translate into writing difficulties in an advanced academic setting. All of the ESL teachers who participated in this research emphasized the need for consciousness-raising, as many ESL students do not seem to grasp that their reading ability affects their writing ability. They agreed that many of the ESL students have not learned to re-read their own writing with the type of analytical skills that are necessary for revision and editing (cf. Raimes, 1991a). Future field testing of the product might also attempt to investigate ESL student awareness of the reading-writing interaction with respect to relational processing and ambiguity problems.

6.3.2 Implications for Linguistic and Language Acquisition Research

It was an important finding to have a well-educated native speaker express concern about the level of difficulty for the rational gap cloze task design. Indeed, the effectiveness of the design of cloze tasks have been criticized regarding what they actually measure when a fixed ration deletion method is used. Alderson, et al. (1995) argues as follows:

> ...one problem with nth word deletion tasks is that the choice of the first deletion can have an effect on the validity of the test, since once that first word is deleted, all the other deletions automatically follow. Experiments comparing tests based on the same text, but with different initial gaps, and therefore different spaces through the passage, have shown that the tests vary in both validity and reliability (Alderson 1978, 1979 and Klein-Braley 1981). Some versions of the test may, for example, have a high proportion of function words deleted, which may be fairly easy for competent language users to restore, and which may distinguish between students of different levels of ability, whereas other versions may have lost a high proportion of content words which may prove to be irretrievable even for native speakers. (p.55)

The assumption or expectation is that deleted function words are very easy for native speakers to retrieve from memory. While it must be recognized that deletions in the exercise samples based on the natural classes of relational categories may affect syntactic categories other than function words, what is perhaps more important is that the previous criticism by Alderson, et al. (1995) does not inform the readers of the readability level of the tasks which were used in the cited research. Readability level is likely a confounding factor in those research results. Consequently, it would be helpful to establish any difference in adult native speaker abilities between the rational option and gap cloze tasks for relational processing skills for texts that are at university level readability. At present there are no studies of comparative native speaker performance on these two relational processing tasks (which I am aware of), to provide any insight into the comparative difficulty that ESL students experienced with the two tasks.

Furthermore, the research on readability seems to be somewhat circular in that readability forumulas are used to determine levels but cloze procedures are used to verify whether or not a readability level holds for reasons of content and background exposure (Allison, et al., 1995; Forgan & Mangrum II, 1989). Because relational processing is a default processing skill with a high level automaticity and redundancy (at least within a text-type), I do not think that the low cloze scores that are claimed to be indicative of instructional reading levels (i.e., 40% to 60%) can be uncritically extended from the fixed-ratio deletion format to a cloze based on the relational profile of the text. Testing of the cloze exercises in a more controlled environment is necessary to scoring ranges that are appropriate, particularly so that the frequency of ESL student error is not so high that the teacher cannot effectively follow up on the task.

6.3.3 Adult Education Constructs

Two of the theoretical constructs that are used to define the adult learner in the Western context are critical thinking skills and self-directedness (Garrison, 1992; 1997; Brookfield, 1987; Candy, 1991). Critical thinking is the ability to identify and question culturally-based assumptions and beliefs that have been previously learned and accepted without conscious scrutiny, and to evaluate those assumptions through critical discourse with informed others. Self-directedness is identified as having two facets: 1) the personal characteristic of responsibility; and 2) the ability to take responsibility for parts of the learning process (e.g., setting goals, choosing assignments, self-evaluation). It is acknowledged however, that these constructs themselves are rooted in culturally-biased learning traditions (Hemphill, 1994) and that there is a need to develop a multicultural perspective in adult education research (Ross-Gordon, 1991; Tudor, 1996).

The ESL teachers involved in this R & D project did agree that a general lack of self-directedness among ESL students is relevant to their response to the handbook. They were also very aware of the difficulties that ESL students face with regard to expectations for self-directedness in the Western university system. There was also one incident which demonstrated that an ESL student can react strongly and negatively to tasks which model the critical thinking process. ESL teachers face the challenge, not only of helping ESL students to learn the English language, but also of helping them to adjust to a system of learning that challenges their cultural foundations and expects a high degree of personal responsibility for learning, particularly at the graduate level. The experience of ESL students and teachers can be a rich source of information about the development of critical thinking and self-directedness. They can also add to the developing and much needed critique of Western assumptions about adult learners.

6.3.4 Conclusions and Implications for Future Materials Development

The research and development process and other types of classroom-based language learning research can be challenging, in terms of gaining access, setting realistic goals, and maintaining teachers cooperation (Schacter & Gass, 1996). This research project received a high level of support from the administrator and the teachers involved. While there was some attrition regarding student participation, there was no clear indication that the change in number of responses was affected by anything other than fluctuating attendance or the regular pressures that the end of the term brings.

The research goals focused on extensive use of the exercises and determining what level of independent use of the student handbook was possible, if any. No one teaching approach or any expected degree of integration of the exercises with the student handbook was specified to the teachers. The teaching styles of the field testing teachers resulted in different techniques for and depth of integration between the handbooks and the exercises. The opinions of the reviewing teachers predicted that for students to work effectively with the answer keys was unlikely, but this impression was formed in the absence of a student version of the handbook. Crystal's approach to the integration of the materials demonstrated the highest level of risk-taking and required the most self-directedness from the students. She had the students use the answer keys and handbooks to self-correct the exercises in groups. As a result, it was possible to collect information about integration problems from the student's perspective.

The only serious procedural problem encountered in the research was related to integration of the materials. There was a breakdown in integration of the exercises with the handbook and with the regular program, because students did not receive copies of their work, as the attempted tasks were collected for the researcher for materials development purposes. My original plan had been to take xerox copies of the attempted tasks, but communication problems, cost, time, and quality of the originals, all contributed to my receiving the originals instead of copies. The breakdown in integration became most evident with Charlene's strategy of feedback, which used the sheets for error pattern identification. However, in every discussion session, and also on some of the exercise questionnaires, there was indication that the students were disappointed that they could not keep the copies of their work.

Since integration of the exercises and the handbook was expected to be problematic for this stage of the materials development and was not established as a priority in the research agenda, the problems encountered in this regard were not viewed as a serious limitation in the research results. However, because the recommendations for future research emphasize a greater degree of integration with the curriculum and more extensive use of the materials, future research efforts will need to include better designed and more specific ways of measuring the extent of the integration achieved in the classroom. In class observation will be more of a priority. A full start up lesson for introducing the handbook will need to be designed, reviewed by ESL teachers and then field tested. Preparation for field testing should also include an in-service preparation session for the teachers, if possible. Depending upon the size of the next field test, this might be conducted in person. For general use of the product, a video presentation and instructional packet might be capable of meeting this need.

The problem of collecting exercise copies may be by-passed by breaking the development into smaller projects. Feedback on exercises can be gathered as they are developed, through sessions with volunteer ESL students, outside of the classroom setting.

A packaging arrangement will be developed that allows ESL teachers to respect their learners entry level skills for self-directedness with regard to the writing process, while providing for increasing learner control of the resources throughout the session. The students want and need copies of the answer keys and their own exercises in order to integrate their learning from the exercises with the framework used in the handbook. ESL teachers will be encouraged to gradually teach their students how to analyze their own performance on the exercises or their writing drafts, using the relational framework.

The next level of field testing requires testing at a larger number of sites. Further development of the product and further field testing will definitely require a research team. Through repeated field-testing cycles, it may be possible to refine the product enough to field test for regular and systematic use throughout a session of ten to thirteen weeks, depending upon access to institutions with students at the appropriate proficiency level.

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Appendix 1

Definition of Advanced ESL Proficiency Level

ACTFL Communicative Proficiency Guidelines

Byrnes & Canale, 1987

ACTFL (1986) Guidelines for the Advanced Levels

(In Byrnes & Canale, 1987)

READING (p. 21, 22)

Advanced	The Advanced level is characterized by -- an ability to read with consistent understanding prose several paragraphs in length, dealing primarily with factual information and intended for the general reader; and -- in areas of special interest or knowledge, an increasing ability to understand parts of texts which are propositionally and linguistically complex.
Advanced	Able to read somewhat longer prose of several paragraphs in length, particularly if presented with a clear underlying structure. The prose is predominantly in familiar sentence patterns. Reader gets the main ideas and facts and misses some details. Comprehension derives not only from situational and subject-matter knowledge but also from increasing control of the language. Texts at this level include descriptions and narrations such as simple short stories, new items, bibliographical information, social notices, personal correspondence, routinized business letters, and simple technical material written for the general reader.
Advanced-Plus	Able to follow essential points of written discourse at the Superior level in areas of special interest or knowledge. Able to understand parts of texts which are conceptually abstract and linguistically complex, and/or texts which treat unfamiliar topics and situations, as well as some texts which involve aspects of target-language culture. Able to comprehend the facts to make appropriate inferences. An emerging awareness of the aesthetic properties of language and of its literary styles permits comprehension of a wider variety of texts, including literary. Misunderstandings may occur.
Superior	The superior level is characterized by an ability to read, for information or for pleasure with almost complete comprehension and at normal speed, a wide variety of texts on a wide variety of topics.
Superior	Able to read with almost complete comprehension and at normal speed expository prose on unfamiliar subjects and a variety of literary texts. Reading ability is not dependent upon subject-matter knowledge, although the reader is not expected to comprehend thoroughly texts which are highly dependent on knowledge of the target culture. Reads easily for pleasure. Superior-level texts feature hypotheses, argumentation and support of opinions and include grammatical patterns and vocabulary ordinarily encountered in academic/professional reading. At this level, due to the control of general vocabulary and structure, the reader is almost always able to match the meanings derived from extralinguistic knowledge with meanings derived from knowledge of the language, allowing for smooth and efficient reading of diverse texts. Occasional misunderstandings may still occur; for example, the reader may experience some difficulty with unusually complex structures and low-frequency idioms. At the Superior level the reader can match strategies, top-down or bottom-up, which are most appropriate to the text. (Top-down strategies rely on real-world knowledge and prediction based on genre and organizational scheme of the text. Bottom-up

strategies rely on actual linguistic knowledge.) Material at this level will include a variety of literary texts, editorials, correspondence, general reports, and technical material in professional fields. Rereading is rarely necessary, and misreading is rare.

WRITING (p. 23, 24)

Advanced	The Advanced level is characterized by an ability to write narratives and descriptions of a factual nature of at least several paragraphs in length on familiar topics.
Advanced	Able to write routine social correspondence and join sentences in simple discourse of at least several paragraphs in length on familiar topics. Can write simple social correspondence, take notes, write cohesive summaries and resumes, as well as narratives and descriptions of a factual nature. Has sufficient writing vocabulary to express self simply with some circumlocution. May still make errors in punctuation, spelling, or the formation of nonalphabetic symbols. Good control of the morphology and the most frequently used syntactic structures, e.g., common word order patterns, coordination, subordination, but makes frequent errors in producing complex sentences. Uses a limited number of cohesive devices, such as pronouns, accurately. Writing may resemble literal translations from the native language, but a sense of organization (rhetorical structure) is emerging. Writing is understandable to natives not used to the writing of nonnatives.
Advanced-Plus	Able to write about a variety of topics with significant precision and in detail. Can write most social and informal business correspondence. Can describe and narrate personal experiences fully but has difficulty supporting points of view in written discourse. Can write about the concrete aspects of topics relating to particular interests and special fields of competence. Often shows remarkable fluency and ease of expression, but under time constraints and pressure writing may be inaccurate. Generally strong in either grammar or vocabulary, but not in both. Weakness and unevenness in one of the foregoing or in spelling or character writing formation may result in occasional miscommunication. Some misuse of vocabulary may still be evident. Style may still be obviously foreign.
Superior	The Superior level is characterized by an ability to write formally and informally on practical, social, and professional topics.
Superior	Able to express self effectively in most formal and informal writing on practical, social, and professional topics. Can write most types of correspondence, such as memos as well as social and business letters, and short research papers and statements of position in areas of special interest or in special fields. Good control of a full range of structures, spelling or nonalphabetic symbol production, and a wide vocabulary allow the writer to hypothesize and present arguments or points of view accurately and effectively. An underlying organization, such as chronological ordering, logical ordering, cause and effect, comparison, and thematic development is strongly evident, although not thoroughly executed and/or not totally reflecting target-language patterns. Although sensitive to differences in formal and informal style, still may not tailor writing precisely to a variety of purposes and/or readers. Errors in writing rarely disturb natives or cause miscommunication.

Appendix 2

Abridged Teacher Handbook

Sample Exercises

An ESL Handbook

on

Relational Structure

Teacher's Version

by Cynthia A. Caswell

(Pre-publication Version)

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Introduction

An ESL Handbook on Relational Structure and the set of exercises that have been designed to accompany it, *Text Profiles in English Language Connectivity,* have been created especially for ESL students and teachers for three purposes. One purpose is to improve communication about the *loss of meaning* that occurs when grammatical errors are made in writing. Meaning, in this case, is *organizational meaning.* It is defined in terms of the conceptual relations that structure text. This handbook provides definitions for a fairly comprehensive range of *conceptual relations* and supplies multiple examples of how these relations are expressed through English syntax.

A second purpose of the materials is to raise awareness: Why is it so much harder to maintain grammatical accuracy when writing in a second language? We can begin to answer this question as we become informed about the characteristics of *relational processing* and the role relational processing plays in the textual processes of reading and writing generally. The source of the problem becomes even more apparent as the consequences of these characteristics are extended to second language processing specifically.

The third purpose, to give ESL students practise in English language relational processing tasks, motivated the creation of the exercises which accompany the teacher's version of the handbook. The relational processing exercises have been designed to be compatible with the process-oriented approach to teaching writing. Each exercise is accompanied by an analysis of the relational structure of the text involved. The handbook, though useful in its own right as a resource for writing, is meant to be used in conjunction with these exercises.

RELATIONAL STRUCTURE

The descriptive system presented in this handbook is called *a natural class framework for relational structure.* It has been synthesized from linguistic research in the field of conceptual semantics. The framework identifies conceptual categories for the way people organize their thoughts and presents them in *natural classes.*

A natural class is a group of conceptual relations that belong together on the basis of shared function; for example, temporal relations all organize concepts in terms of their orientation to TIME. An important fact about the natural classes that make up relational structure is that they are constrained by the natural limits of the human perceptual system. Our perceptions are inherently *organized,* physically, psychologically, and socially. Although different cultures may have a different viewpoint on the value of TIME or the allocation of SPACE, all cultures and languages do share the general concepts of time and space. Because meaning is organized and structured conceptually, before it is ever expressed grammatically in any language, these categories are considered crosslinguistically valid. They are relevant for expressing the natural biases and generalities in the way people of any culture organize their perceptions. The purpose of this handbook will be to assist ESL students in understanding how English grammar and English words specifically convey these relations.

The crosslinguistic validity of these categories does not, of course, contradict the idea that culture has a significant effect on writing. Rather, it provides both ESL students and teachers with a basis for describing various ways that content can be organized in writing and a basis for identifying patterns of organization that are characteristic of English language style. The examples provided here are not exhaustive, but are hopefully sufficient to illustrate the point that grammar truly conveys meaning, *organizational meaning*. Without organizational meaning our self-expression would definitely be simplistic and limited.

RELATIONAL PROCESSING

Although it is common for ESL teachers and students to view grammar errors as *sentence level* problems, relational processing theory indicates otherwise. It is important for language students and teachers to recognize that there is no definitive break between sentence level grammar and text grammar. Extended text processing, however, always requires a person to use relational and grammatical knowledge in a highly integrated way, while individual sentences can vary greatly in their grammatical complexity and usually require less integration of relational knowledge.

Text (discourse) grammar is the study of the structural organization of language beyond the sentence level. That structure is critically dependant upon the *conceptual relations* defined in this manual. Researchers who study text grammar and text processing are interested in how people actually use their knowledge of grammar to produce and comprehend language when listening, speaking, reading or writing for extended periods of time, within the constraints of specific contexts.

Several characteristics of *relational processing* are introduced in this manual: skill in disambiguating meanings, the capacity for inferencing, and the ability to distinguish minimal perceptual differences in letter-sound patterns. In a second language, relational processing also requires learning a new set of patterns for the associations between the relational categories of thought and the grammatical categories of language which may express them. This handbook explains in more detail how these skills relate to mastering the *text-grammar* of a second language. It is my hope that this explanation will help ESL teacher and students to appreciate the sophistication of achieving textual competence in a second language and have patience with the process as a result.

RELATIONAL PROCESSING EXERCISES

The range of tasks that one encounters in textbooks designed for ESL writing students sometimes jumps dramatically from sentence level grammatical recognition tasks that focus on only one aspect of relational structure to writing tasks that require the simultaneous integration of many relations. It is often expected that ESL students will learn relational structure *implicitly* as they read and then automatically know how to employ it in their writing. In contrast to the implicit learning approach, this handbook and the exercises that accompany it are designed to assist ESL instructors in teaching relational structure explicitly. The majority of the examples in the handbook which are used to introduce relational structure are limited to the context of the sentence. However, after all of the subtypes that represent a major class have been introduced, a text sample is presented that demonstrates the use of that class of relations in extended text. A set of *text-grammar based exercises* have also been developed to accompany the handbook. These exercises focus on patterns of relations in different text types. The exercises allow students to practise relational processing on a variety of text-types written about different themes. The exercises begin with recognition tasks and gradually become more difficult, eventually challenging the student to revise and edit text segments on the basis of their relational and syntactic knowledge.

USING THE HANDBOOK

The majority of this handbook is dedicated to providing vocabulary terms, definitions, and examples of English usage for an extensive range of relational concepts, because they are abstract and it is often difficult for both teachers and students to find the words to talk about them explicitly. It is not intended that a student or teacher make an effort to memorize all the subcategories provided here. However, it is a good idea to become familiar with the ten natural classes of relations and the structure of the handbook, in order to use it effectively as a resource for the revision and editing stages of the writing process and as a complement to the relational processing based exercises in *Text Profiles in English Language Connectivity.* This handbook is different than many others in that its basic structure is organized on the basis of conceptual categories, not syntactic ones. The table of contents only gives access.to information by the names of major natural classes. However, the index provides access to information by the names of relational subtypes; by specific English function words, bound morphemes, and connective phrases; or by syntactic categories.

Relational Structure and Relational Processing

RELATIONAL PROCESSING THEORY

Relational processing is defined here a subset of language processing phenomena. The study of language processing focuses on the way language is represented in and accessed from memory, and how it is reconstructed into meaningful expressions in automatic, subconscious ways. When we listen and speak in our first language, we are rarely aware of the structure of our language. Our ability seems effortless. We focus on the message being conveyed or received, not on the form that carries its expression.

However, becoming literate requires meta-linguistic awareness, that is: awareness of the structural features of language itself. The field of linguistics is divided into many theoretical areas that each focus on a particular type of language structure. Phonology is the study of the structure and patterning of language sounds. Morphology is the the study of the structure and patterning of words. Syntax is the study of the structuring and patterning of phrasal constituents and sentences. Discourse is the study of the structure and patterning of communication events; and, finally, conceptual semantics and text-representation are fields that study the structure and patterning of ideas and their representation in memory. When we learn to read and write, all of these various types and levels of structure are related to a graphic coding system, the orthography of a language.

Whether we listen, speak, read, or write, we use the structure of language and ideas to convey or understand a message. When we want to send a message, we begin by choosing a topic or an idea and organizing it conceptually. Those concepts are matched with structures for sentences and words, which are in turn matched with sound patterns and the instructions for producing those sounds orally or for re-encoding them into an orthography. When we receive a message, we begin with the sound or the written code, and the matching process is computed in reverse, ending up with the concepts, and hopefully, a coherent representation of an idea or topic.

While all of these areas of linguistic study contribute to an understanding of language processing, relational processing is another area of study that cuts across the traditional lines of inquiry and focuses specifically on conceptual relations and how they are expressed through the grammatical structure of language. Conceptual relations are links in conceptual structure. They connect ideas into more and more complex organizations, which are called text representations. Our purpose in this handbook is to understand a little more about the nature of conceptual structure and relational processing, and to apply those insights to the challenge of learning to write in a second language.

CONCEPTUAL STRUCTURE IN TEXT REPRESENTATION

The term *conceptual structure* is not difficult to understand literally. But it leads us to ask the question: In what ways are concepts structured? An important distinction in theory about human conceptual organization is the classification of concepts into relational and nonrelational entities.

Relational categories fall into 10 major classes: IDENTIFICATIONAL, THEMATIC, SPATIAL, TEMPORAL, PSYCHOLOGICAL, LOGICAL, MANNER, CO-REFERENCE, SOCIAL and NONLITERAL. The majority of this manual is focused on defining relational categories and giving examples of how they are expressed in the English language. However, a few fairly self-obvious examples or the relational categories will be presented here, as the generalizations about relational processing that follow in the next sections will not be very useful, if one has not grasped the nature of the general category.

Relational concepts are very abstract and express a limited range of meanings. Nevertheless, the meanings that relational categories do express are very important in language processing, because they allow a text-producer (a speaker or writer) to join nonrelational ideas together into more complex expressions. They are the categories that we choose to express the arrangement or organization of objects and actions that we perceive (e.g. the organizational characteristics in a picture).

RELATIONAL CATEGORIES

IDENTIFICATIONAL:	Attributive - The cat ***is*** brown.
THEMATIC:	Beneficiary - Mike picked up the package ***for*** Bill.
SPATIAL:	Distribution - Garbage was littered ***all over*** the field.
TEMPORAL:	Chronological - ***Before*** you leave, talk to your father.
PSYCHOLOGICAL:	Attitude - I ***doubt*** that you will get a reply from him.
LOGICAL:	Comparative - Alice is ***smaller than*** Rosy is.
MANNER:	Basic - The woman spoke ***in*** a harsh, raspy voice.
COREFERENCE:	Personal - The king ... ***He*** made a new law.
SOCIAL:	Kinship - The ***sister of*** Max is Marie.
NONLITERAL:	Idiom - Let's ***hit the road!*** (Means: Let's leave...Let's start driving, etc.)

Nonrelational categories are identified as THINGS, ACTIVITIES, PROCESSES, STATES, and PROPERTIES. In contrast to relational categories, these categories usually express entities which we would commonly identify as distinctive parts of the totality of what we see in a visual field (e.g. objects in a picture). They are expressed through words that are typically judged to be highly concrete and very *meaning full*, the **content** words of a text.

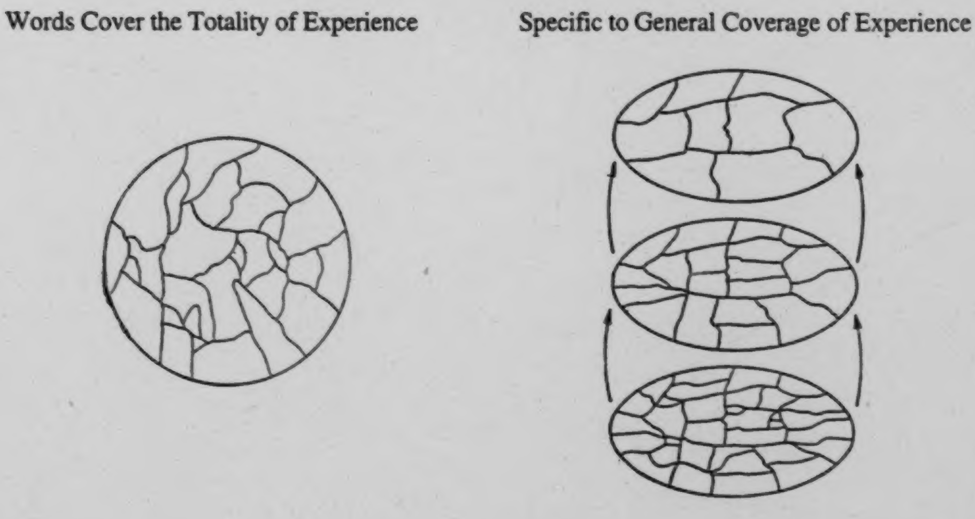
NONRELATIONAL CATEGORIES

THINGS:	- Inanimate Objects (e.g. stone, book, car, etc.) - Animate Objects (e.g. deer, lion, cat, mouse, etc.) - Person/People (e.g. man, woman, children, Bob, Lucy, etc.) - Abstractions (e.g. philosophy, belief, etc.) - Places (e.g. city, country, Geneva, France, etc.) - Simple Events (e.g. Christmas, parade, war etc.) - Situation (e.g. crisis, famine, flood)
ACTIVITIES:	- Actions (e.g. bring, take, hit, etc.) - Achievements (e.g. produce, create, compose, etc.) - Motion (e.g. go, move, walk, fly, etc.) - Transactions (e.g. get, give, receive, buy, sell, etc.) - Communication (e.g. announce, tell, whisper, etc.)
PROCESSES:	- Change of State (e.g. soured, bloomed, etc.) - Event Series (e.g. reviewed, deliberated, etc.) - Mental (e.g. thought, evaluated, etc.)
STATES:	- Existence (e.g. be, remain, exist, etc.) - Derived (e.g. tanned, broken, etc.) - Natural phenomenon (e.g. storm, rain, snow, etc.)
PROPERTIES:	- Ambience (e.g. moody, quiet, good, bad, etc.) - Color (e.g. red, black, white, purple, etc.) - Quantity (e.g. one, two, three, etc.) - Size (e.g. large, small, wide, etc.) - Shape (e.g. round, square, oval, etc.) - Substance (e.g. wooden, metal, plastic, etc.)

CONCEPTS AND WORDS

It is important at this point in our discussion of conceptual structure to state a few guidelines about the relationship between concepts and words. First of all, *a single concept is sometimes, but not consistently, equivalent to a single word or word part.* Each language community is able to express the totality of its experience through words. Multiple concepts are bundled together under the labels of words but each language community does not bundle concepts together in the same configurations or patterns. Also, each language community is able to express its experience at different levels of specificity or generality, but languages differ in how they classify many concepts and objects (cf. figure 1 - adapted from Nida; 1969).

Figure 1 - Words and Conceptual Coverage



Words Cover the Totality of Experience

Specific to General Coverage of Experience

It is entirely possible for a single word to include a bundle of concepts which includes both nonrelational and relational categories.The grouping of concepts can occur at the conceptual level or in the grammar at the morphological level through word building. Words may have several parts. One word part may be nonrelational and the other word part be relational. Linguists use the term *morpheme* instead of the term *word* when talking about the minimal meaning units of a language. Some morphemes are *bound* and some are *free*. In English, the word *girl* is a free, nonrelational morpheme. It can stand alone in a sentence and act as a noun. In English, there are a number of concepts expressed by the letter *-s*. One of them is the concept of *plural* (agreement marking). The plural morpheme, when represented by the letter *-s*, is a bound, relational morpheme; it has to be attached to another morpheme in order to be used in a sentence (e.g. *girl + -s = girls).*

There are also two types of bound morphemes: *inflectional* and *derivational.* The exact nature of each of these categories is still a matter of dispute among linguists. However, the following distinction is usually sufficient for the second language learning context: inflectional morphemes do not change the grammatical category of a word and derivational morphemes do. For example, when the *-s* morpheme when added to the *noun* morpheme *girl,* it does not change the grammatical category; *girls* is still a noun. In contrast, if one adds the morpheme *-er* to the *verb* morpheme *teach,* the result is the noun *teacher.* The grammatical category of the word has changed from a verb to a noun, so the English morpheme *-er* is considered a derivational morpheme. Are there any patterns in the way that nonrelational and relational concepts relate to word parts? Well, words not only have different parts, but they also have grammatical categories. The question of patterning involves the relationship of concepts and word parts to grammatical categories. The next section deals with those relationships in some depth.

CONCEPTUAL AND SYNTACTIC CATEGORIES

Just as conceptual structure is divided into two main types of entities (relational and nonrelational), grammatical structure or syntactic structure, is also divided into two main categories called lexical (substantive) and functional categories. It should be mentioned from the beginning, that although most linguists recognize this distinction, different theoretical fields differ as to which syntactic categories they place within the two major divisions. The theory that is presented here draws most heavily from the categorizations used by researchers in language processing, first language acquisition, and translation, who employ conceptual structure and include semantic issues in their formalizations. When these linguists try to explain lexical and functional categories, they usually refer to prototypical mapping relations to help rationalize the grouping of syntactic categories with respect to the two main conceptual divisions. Prototypical mapping relations are the most common ways of relating concept to form in a given language. It is believed that these prototypical matchings of concepts with syntactic categories are very important to a child's acquisition of language and the ability to relate meaning structure to language structure. They are likely to be equally important in getting started in second language acquisition, as well.

The syntactic categories that most linguists would agree belong to the lexical class are nouns, verbs, and descriptive adjectives (and perhaps derivational morphemes). Lexical categories prototypically map nonrelational entities: things, activities, processes, states and properties. The syntactic categories that are generally agreed upon by linguists as belonging to the functional class are the inflectional bound morphemes: mood, tense, aspect markers on verbs, case marking (including the English possessive marker *-'s),* adverbial particles that function as subordinating conjunctions, coordinating conjunctions, articles, and pronouns. These categories prototypically map relational categories.

Most linguists involved in language processing, translation, and cross-linguistic studies on language acquisition also consider adpositions (e.g. prepositional particles, post-positional particles and infixes) to be functional categories, because they seem to be restricted to indicating relational concepts. [1] While it is clear that many adverbial particles function connectively in English, it is not likely that all adverb forms (marked with *-ly*) do so. Consequently, the adverbial category as it is used in descriptive linguistics is ambiguous between lexical and functional forms and each form has to be judged in context (cf. MANNER-relations for more detail).

Agreement marking is a category which is also not agreed upon as being functional in the sentence level syntactic sense.[2] Agreement is based on a different range of features. The most common ones are person, number, and gender, but many languages also use case agreement. Verbs may be marked to indicate agreement in person, number and/or gender with either its subject or object, or both. Languages which use this kind of agreement marking have the ability to leave out subject and/or object pronominals and the sentence will still be grammatical. This is possible because the agreement markings can activate processing for an antecedent in the same way that pronouns do. The English language only marks the third person singular verb distinctly. Consequently, it requires that all sentences have subjects and objects (unless the verb is intransitive, then no object is required). In English, if a writer does not want to repeat a particular noun phrase, then a pronoun form must be used to maintain the identity of the concept as the text continues. Many, but not all, English pronoun forms are marked with case to indicate whether they may function as subject or object in the sentence. Number is also marked on demonstrative pro-forms (called limiting adjectives in descriptive grammar) and they must agree with the number of the noun that they modify. In this way, the demonstrative may actually substitute for the entire noun phrase in the context of a text.

English does not mark adjectives for case agreement, but many other languages do. When a language marks the adjective for either strong or weak case agreement with the noun, then that agreement is processed to create IDENTIFICATIONAL relations (cf. page 22) between the noun and the adjective. When a language does not use case marking, then these relations must either be inferred from the position of the adjective and the noun or the copula (verb - to be) may be required to signal these relations. In English, this is the case. In order to establish an attributive relationship between a noun and an adjective, the adjective must either be positioned between an article and the noun, precede the noun when no article is involved, or be linked to the noun by an appropriate form of the verb *to be.*

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[1] The position held by many of these linguists stands in contrast to the analysis that has long been used by generative grammarians, which considers prepositions in English to be a *lexical* category (for a very different set of reasons to do with abstract case assignment, which is a very difficult concept to apply in language learning.) It is only recently that generative grammarians have come to consider articles and pronominal forms as functional categories, although their connective tendencies have been of interest for quite some time in other fields. In many non-English languages, articles are case-marked and thus clearly indicate relational meaning. Also, pronominals have been assigned a relational role (COREFERENCE) by text linguists because of the way they function to connect extended text together. Generative syntacticians have eventually accepted these syntactic categories as being in the functional group on the basis of similar cross-linguistic considerations. However, it is really only in the last ten years that generative linguists have focussed more specifically on issues related to functional categories.

[2] During the early 1990's agreement categories were considered to have positions in projection structures and thus were syntactically considered functional categories (cf. Ouhalla, 1990; 1994). In Chomsky's (1995) *The Minimalist Program,* an analysis is offered which would change the status of agreement categories with respect to verbs. However, it is not an analysis which takes relational processing issues into account.

Another category which may very well be functional are those words in English which are are commonly called limiting adjectives in descriptive grammars (e.g. *these* coats, *those* books, *any* money, *each* person, *other* hand, *etc.*). These words tend to pattern in their language functioning sometimes like articles, other times like adverbial particles, and in still other cases like pronouns. They may not be adjectives at all. Descriptive grammarians have already noted that they do not pattern like regular descriptive adjectives. For example, note the following acceptable and unacceptable constructions for noun phrases in English:

Acceptable	**Unacceptable**
the red car	* red the car
any old shirt	* old any shirt
the other square box	* square other the box

The words which are analyzed as delimiting adjectives in descriptive grammars have to remain on the outer left of the noun phrase construction.[3] Some of the recent analyses in generative grammar actually place these elements outside of the noun phrase in an abstract *functional* phrasal categories called DP and AgrP (Determiner Phrase; and Agreement Phrase; Ouhalla, 1990; 1994).[4]

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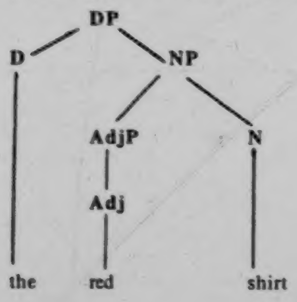
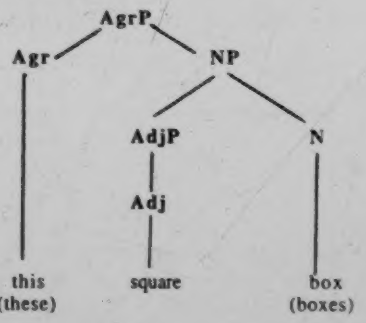
[3] There are also constraints on the order in which describing adjectives are placed before a noun (e.g. *old, red car* not *red, old car* (unless in comparison: *the red, new car...not the red, old car*). However, the limiting adjectives must still be place further away from the noun than any of the types of descriptive adjectives.

[4] Consider these examples of limiting adjectives analyzed as DP and AgrP categories that are connective elements out side of the noun phrase (NP). Note AdjP = Adjective Phrase.





What have been typically termed subject and object pronouns in English are also considered to be part of the DP category in generative grammar, because pronouns are case marked in order to link into the larger sentence unit. The formalisms used in generative grammar change very frequently, and as of yet, a number of the issues that the paradigm pursues have not been considered very useful for teaching second languages in the classroom (although they are considered useful for second language acquisition research). It is not important that ESL students and teachers use the generative paradigm specifically, as long as they recognize the concept that delimiting adjectives (including articles) and pronominals pattern in similar ways and have connective properties.

Within this manual, the limiting adjective categories are discussed under COREFERENCE relations and are generally linked together under the syntactic concept of a proform.[5] Proforms are semantically underspecified words or phrasal units that replace more specific words in a text. Many times they co-refer with the word they replace to the same concept in memory, so that the concept can be remembered without repeating the exact word(s) again. For example: *My brother Bruce bought a new* ***car***. *He is very proud of* ***it***. *He* is a proform that replaces *Bruce* and *it* is a proform that replaces *car*.

Other times, proforms can only be interpreted by knowledge from the text-representation or other real word knowledge that a reader possesses and uses to interpret a text. For example, consider the phrase: '*some* food'. In each of the following two sentences, the amount represented by the word *some* is likely to be interpreted very differently by the reader. (1) *The mother put* ***some*** *food in her daughter's lunch kit*; and (2) *The men loaded* ***some*** *food onto the truck carrying relief aide to Manitoba.* In each case, the reader imagines a different amount of food, whose size depends on the capacity of the container mentioned in each context.

Up to this point, we have been considering only the prototypical relationship of lexical syntactic categories to nonrelational conceptual categories and the prototypical relationship of functional syntactic categories to relational conceptual categories. Although no language remains this simple in its correspondences between syntactic and conceptual categories, they do appear to operate under some very general constraints that are asymmetrical. Lexical syntactic categories and derivational morphemes are able to correspond to both nonrelational and relational categories (e.g. consider: the noun *day* - TEMPORAL relation/object; the verb *hate* - PSYCHOLOGICAL relation; child-*ish* - derivational morpheme; LOGICAL-comparative relation). In contrast, functional syntactic categories are only able to correspond to relational conceptual categories (or at least those which are partially relational). So, while a concept that is relational may be expressed through either a lexical or a functional syntactic category and both inflectional and derivational morpheme types, nonrelational categories are never expressed via functional categories, be they free forms or bound, inflectional morphemes (Slobin, 1985).

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[5] **The analyses that accompany the relational processing exercises indicate either pronominal or proform, plus the appropriate category in descriptive grammar.**

While these very general constraints seem to hold for those languages which linguists have been able to document (and not all have been documented), it is important to remember that not all languages actually employ all of the lexical or functional categories which linguists have found to exist crosslinguistically. This inconsistency means that prototypical correspondences between conceptual categories and syntactic categories take on a specific style in each language, according to the syntactic categories that are available in that language. Furthermore, because relational categories can be expressed through such a wide range of syntactic categories, their patterns of expression can and do vary considerably from one language to the next. These factors are all reasons why concepts expressed through one language can not be translated literally, word for word, syntactic category for syntactic category, into another language.

FUNCTIONAL CATEGORIES AND L1 TEXT PROCESSING

Children acquiring their first language learn to properly use function words and structure sentences only after they have already mastered many nouns, verbs and adjectives. Linguists are studying the order in which children learn functional categories in their first language and those which are learned early are to some degree constrained by a child's cognitive development, the type of conceptual relations a child is capable of understanding and the types of functional categories that the child's language uses most. It takes a number of years for a child to learn the many-to-many correspondences between relational structure and functional categories. This learning continues into the school years and overlaps with literacy training. Researchers in reading development report that function words are more difficult than nonfunctional words for children to learn to read. The features that make them difficult to learn are: semantic abstractness, ambiguity, and minimal perceptual differences in their letter-to-sound representations and grammatical functions. Also, the explicit expression of relations is not always obligatory, so they must be inferred in certain contexts.

Linguists have conducted research that demonstrates that adult native speakers of English recognize the functional categories of the language with great speed and automaticity during sentence processing (reading) tasks. This automaticity is at least partially due to the fact that function words and bound morphemes are easily stimulated in memory by the sheer frequency of their occurrence in text. After so many years of speaking, listening, and reading, a native speaker has fairly automatic text processing control in those domains. They can disambiguate both functional and lexical words in context and perceive minimal differences with little difficulty.[6]

However, writing, even for native speakers, tends to be subject to differences in automaticity. Those who write professionally learn, not only the patterning of function words for creating various types of sentences, but also larger scale patterns that organize sentences and paragraphs into specific text-types required for the type of writing that they do (i.e. journalism or academic writing). Nevertheless, good writers and even professional writers in a first language, recognize that they need to revise and edit their writing. They use the writing process to develop and refine their ideas. They do not expect to express their ideas perfectly in one draft.

Experienced, proficient writers are also sensitive to the way that grammar creates style in a text, through patterns of structure. It is difficult to make an absolute distinction between sentence level grammar and rhetorical organization or text structure, though many theorists try to do so. Sentence level grammar and rhetorical organization are actually more like two ends of a continuum that naturally converges somewhere in the middle. Correct use of functional categories throughout a text enhances the organizational properties of that text. Sentence and paragraph order interacts with proper use of connectives and other transitional devices to create the effect of a unified, well-formed text.

FUNCTIONAL CATEGORIES AND L2 TEXT PROCESSING

Second language learners, who are adults, are already proficient at expressing relational concepts and organizing their ideas with the syntactic patterns that are natural to their first languages -- at least in speaking and listening, and perhaps also in reading and writing. Nevertheless, when they first begin linking concepts together in a second language, they may find themselves limited to word order and only a few functional categories. As time progresses they begin to acquire the functional categories of the second language, but as with a first language, it takes considerable time to learn the full range of meanings and patterns that are connected with any given function word or bound morpheme. Because relational morphemes are ambiguous, it can not be assumed that L2 learners find it easy to infer the right relation when they read a connective word in text, particularly if they can not understand some of the nonrelational words that might help disambiguate the relation. Unless L2 learners are effectively processing the functional categories in their reading, they will not likely be able to transfer those categories into their writing. Recognition ability proceeds production skills.

The level of automaticity achieved for text processing skills in a first language is not as high as that of pronunciation skills. Still, second language learners will generally experience more interference from their L1 in the relational/functional aspects of text processing than in the content aspects of text processing. L1 pronunciation automaticity is tied to both the muscular system (articulatory development in childhood) and frequency effects. The sound features and units of a language are repeated and recombined far more often than any other type of language category. L1 relational processing automaticity, however, is dependant only upon frequency effects. Many relational categories are produced through function words and morphemes, which occur in text with far more frequency than content words. The general principle is: the more automatic the language skill-type is, the more interference there will be from L1 to L2.

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[6] This is not true for native speaker who have language learning disabilities or reading disabilities or for many native speakers, who for a variety of reasons are 'functionally literate' but do not know and use the standards required for academic writing (i.e. called *basic* writers; cf. Moran & Jacobi, 1990).

However, it is important to also remember that L1 text processing abilities will not be entirely detrimental to second language learning. Literacy skills in an L1 are known to transfer positively to literacy development in an L2. Successful use of L1 and literacy knowledge is dependent upon learner awareness and the ability to adapt reading and writing strategies to the L2 situation.

With these factors in mind, the purpose of this manual is to remind teachers and students that learning relational processing skills in a second language is not only affected by the learner's first language but is also affected by the general factors that make such processing difficult to acquire in any language. Relational words and morphemes are highly ambiguous, have complex spheres of usage, are recognized on the basis of minimal perceptual differences, and vary in their expression along a continuum of explicitness to implicitness. Each of these potential problem areas will be discussed in detail for the English language.

RELATIONAL MORPHEMES AND LEXICAL AMBIGUITY

Relational morphemes, like the majority of words in a language, are ambiguous. They have multiple meanings and the appropriate meaning in any given sentence is dependent upon the context of the conversation or text. In fact, relational morphemes are likely more ambiguous that most content words. Furthermore, because they represent very abstract concepts, it can be more difficult to express which relation they convey in context than to express the specific meaning of a content word in context. For example, the word *bank* can mean (1) the ground at the edge of a river; or (2) a financial institution; or (3) a building where money is deposited and withdrawn. The presence of other key words in a sentence, like *river* or *money*, assist in disambiguating the meaning of the word. Now, consider the following disambiguation exercise for English function words.

Relational Disambiguation Exercise

How would you explain the meaning differences (the relational categories) of the highlighted function words in these examples:

1. a. We are going **to** the store.
   b. Give the shoes **to** Bill.
   c. He bought the flowers **to** impress her.

2. a. **For** Bob to be late was unusual.
   b. Joe bought flowers **for** Mary.
   c. Jim bought flowers **for** Joe to give to Mary.
   d. There is a need **for** a new policy.
   e. **For** he's a jolly good fellow....
   f. Jill was angry **for** her work load was unbearable.

3. a. The boat swung **about**.
   b. He lectured **about** the American civil war.
   c. The bus comes at **about** 3:15 p.m.
   d. The child ran **about** the room, screaming loudly.

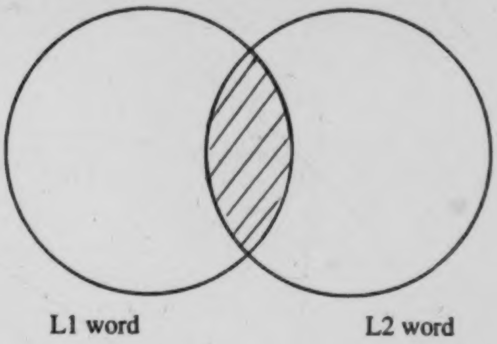
4. a. **Their** house was burned down.
   b. **They're** unhappy about it.
   c. **There** is a fine sunset, if I ever saw one.

An answer key for this exercise, based on the relational categories taught in this handbook, is available at the end of this section. If you found it difficult to express the relational differences between the specific uses of these function words, the taxonomy of categories which are presented in the next major section of this handbook can help you to communicate more clearly about those abstract relations and the organizational structure of text.

RELATIONAL MORPHEMES AND SPHERE OF USAGE

Another important characteristic about any word is its **sphere of usage.** The sphere of usage for a morpheme or word part is the variety of meanings it can express and structural contexts in which it may occur. The reason that sphere of usage is important to second language acquisition generally and relational processing specifically is that the spheres of usage for a pair of words rarely overlap completely between and L1 and an L2 (as expressed in figure 2). This is true for any word, but it is especially common for function words and morphemes. Lack of overlap between functional categories and words is common even for closely related languages like German and English. The use of prepositions and case in those two languages is a good example.

Figure 2 - Partial Overlap in Spheres of Usage



Consider the following brief comparison between English and German regarding the English preposition *in (into):*

English Expression	German Expression
I will go ***(in) to*** the office today.	...***ins*** Buro (in + accusative case)
Speak ***in*** English!	...***auf*** Englisch (auf)
In the winter,...	***Im*** Winter (in + dative case)
I live ***in*** the country.	....***auf dem*** Land (auf + dative case)

These kinds of differences in patterning exist for every language pair. There are patterns for the usage of each connective element in each language. But there is only partial overlap. Many of the connectivity errors that an L2 student makes when writing and speaking may be extensions of an L2 function word to the sphere of usage of an L1 counterpart in an area where their spheres of usage do not overlap.

MINIMAL PERCEPTUAL DIFFERENCES

The graphic and phonological features of function words must be processed on the basis of minimal perceptual differences in their sound and letter units. When these words are displayed in groupings that emphasize this characteristic, it becomes more apparent.

English Function Words:

she the he
it at an
as us is
am an on in
they them then than
this his him
their there here her
off of from for

Why are minimal perceptual differences significant in text processing activities like reading and writing? The answer is based on the way people store information in and recall information from memory. Sound and letter features are very important cues, which are used to establish the representation of a word in long term memory. However, research on memory in text processing has shown that when we are recalling a word from memory, several vocabulary items that share similar auditory, visual, semantic and grammatical features are activated simultaneously (Garman, 1990). Then we use certain distinctive features from the processing context in order to select the correct item. Selection is a subconscious process and we would not be aware of the phenomenon of multiple-activation of forms in memory, if it were not for the fact that competent native speakers make performance errors - word substitutions. These substitution errors are not limited to function words. However, function words, because they belong to a closed class of forms that are only allowed to express grammatical categories, will constantly be activated together and may be easily confused or substituted for one another during text processing. This is particularly true if a person has trouble with processing minimal perceptual differences.

How is this significant for learning English as a second language? First of all, compared to many of the world's languages, English has a complex vowel system. Some of the vowels distinctions that determine minimal pairs of function words in English may be difficult for nonnative speakers to distinguish. So, it can be difficult for them to establish a separate mental representation for words that differ on the basis of vowel distinctions that they do not perceive or have difficulty producing. Visual memory can help over come this difficulty provided that ESL students are really disambiguating functional items when they read and making an effort to establish which conceptual relation each function word represents in specific contexts, and are able to see grammatical similarities or patterns in contexts, rather than just groups of words.

A second reason why ESL students may have difficulty recalling function words accurately from memory is that their grammar is still developing. They do not have at their disposal an awareness of the sphere of usage for each of the function words. Grammatical knowledge is a prerequisite to disambiguation skills. This is especially true for function words which are also homonyms, because their sound representations are the same (e.g. their, there; our, are). Since the spheres of usage for function words do overlap within L1, it can be difficult to know which form is appropriate in a novel context. In such cases, an ESL student may simply be guessing, rather than mis-selecting a word. A third reason that ESL students may experience difficulty with function words is that a number of these words undergo contraction in spoken English. They have to learn both the contracted and uncontracted systems in order to write for situations that require academic English.

In L2 processing, these language internal types of processing difficulty are likely to be compounded by any minimal differences in the sound inventory between L1 and L2 and a tendency to resort to using L1 syntactic patterns with L2 words.

EXPLICIT VERSUS IMPLICIT MARKING OF RELATIONS

The last area of processing that we will consider is the explicit-implicit continuum for the expression of relational categories. The continuum presented in figure 3 shows a range of expression from highly explicit to almost totally implicit marking of relations.

Figure 3 - The Explicit-Implicit Continuum

Highly Explicit	**English Examples:**
Chapters, Titles & Headlines	- *Chapter One, ... Summary, ...Conclusion, etc.*
Phrase Structure	- *In conclusion, ... In the meantime,... ...etc.*
Text Level Conjunctions	- *Meanwhile, ... However, ... Nevertheless,...etc.*
Foregrounded Adverbials	- *Suddenly, ... Not surprisingly, ... Frequently,...etc.*
Clause Level Conjunctions,	- *and, ... but, ... either...or, neither...nor...etc.*
Subordinating Adverbs	- *while, ... since, ... after, ... before...etc.*
Relative & Question Pronouns	- *which, ...what, ...how,...etc.*
Proforms	- *he, ... she, ...they, ...any, ...each, ...etc*
Prepositions, Particles	- *for, ...at, ...by, ...with, ...on, ...up, ... etc.*
Case Marking *	- *he, ... him, ... his**
Phrase Position	- noun phrase position relative to the verb
Productive Morphology	- child-*ish*, ...*un*-likely, ...play-*ed*, ...etc.
Agreement Marking	- *picks, ...fights,... holds,....* etc.
Punctuation	- period, comma, colon, etc.
Paragraph Signals	- indentation, double spacing, etc.
Highly Implicit	

* Note: English does not have case marking on adjectives or nouns, only on proforms, so it is not a very good example of the hierarchy with regard to case marking in general. However, other languages do have case-marking on unreduced categories.

Because languages differ as to which types of functional categories and connective patterns they use, the overall tendency of each language will have a different bias towards implicit or explicit connections at various levels of text processing. Some languages generally prefer to make highly explicit connections between sentences and paragraphs. Others make the most explicit connections between main and subordinate clauses, while leaving sentence and paragraph transitions fairly implicit. The text-type usually plays a role in determining some of the explicit-implicit characteristics of connector distribution. However, there are options for students to express individual style, as well. In English academic writing, particularly for theses and essays, it is necessary for an author to be very explicit about the connections between various parts of the text and to be very direct about taking a position on an issue and trying to convince others of a particular point of view. Lack of explicitness is likely to be interpreted as inadequate explanation and defense of one's position, not a complement to readers ability to draw a conclusion.

An important thing to remember is that the reader may not infer the relationship that the text producer expected him or her to establish, unless the connection is explicit or follows the implicit positional patterns that are natural for the reader's mother tongue, in this case, English. Furthermore, the incorrect use of a connective may lead the reader to establish the wrong relationship and to be come confused about the content, because the connection does not seem appropriate or realistic. There are two general principles that are important here. The more explicit the type of connective is, the greater the confusion is likely to be, if that connective is not appropriate. The more frequent a connective type is, the more annoying it will be for the native speaking reader or audience, if it is incorrect.

It is true that relations between nonrelational concepts can be inferred, but not without expending considerable effort and concentration during processing. Research into L1 relational processing has shown, that in the presence of an explicit connector, readers will establish a relation; but in the absence of an explicit connection, they do not necessarily try to establish any definite relationship between a pair of sentences.

The ability to establish a relationship which is not explicitly stated is called inferencing. Much of the inferring that readers do, has to do with relating the text currently being read, to a model of a text-type and relevant real-world knowledge, in order to help predict the development of the text. A reader's tolerance for implicitness is determined and limited by culture specific patterns for text-types. While it is true that the L1 rhetorical patterns and the cultural backgrounds of ESL students are interesting and valuable, they simply are not available to the majority of the L2 audience, some of whom are non-ESL instructors, who are responsible to assess an student's acquisition of specific knowledge and skills through their individual presentations using English as a second language. It is not wise to expect them to educate themselves on issues in cross-cultural rhetoric. Self-editing skills (Ferris, 1995) and the assistance of an objective editor is an asset to any writer, whether they be native or non-native language users.

Cultural knowledge, knowing what may be assumed, is also very important to adopting the appropriate style of connectivity in a language generally and for a text-type specifically. University disciplines are sub-cultures with specialized languages. Successful ESL writing students are text analyzers who are aware of the writing style of their discipline and attempt to imitate it (Mendonca & Johnson, 1994). As well as mastering the vocabulary that is foundational to their discipline, it will help students if they are sensitive the way that specific relational subtypes are expressed at different levels of explicitness within the context of a text-type. They need that type of information in order to master the writing style of their discipline. The vocabulary for relational categories outlined in this manual is intended to increase the ESL student's ability to analyze and appropriate English language connectivity skills.

SUMMARY

Relational processing theory explains an area of language processing skill that is very important to creating and understanding text structure. Concepts are organized according to relational and nonrelational categories, and natural language syntax is divided into lexical and functional categories. Relational processing involves expressing conceptual relations through the grammatical categories of a language, and relational categories have a special relationship to the functional categories of syntax.

Because it is a fairly automatic skill and is similar to pronunciation in its tendency to be subject to L1 interference, understanding basic concepts about relational processing should be helpful to second language learners. There are characteristics of relational processing that make it difficult to acquire in both first and second language learning situations. 1) lexical ambiguity, 2) partial overlap in the sphere of usage, 3) minimal perceptual differences, and 4) variation in the explicitness or implicitness of expression are four factors about functional morphemes that contribute to the complexity of relational processing in any language. Awareness of these four factors, along with the English terms for relational concepts, provides a mutual basis for explicit dialogue between teacher and student on the organizational patterns of English language connectivity and the student's development in mastery of their use.

Answer Key for Relational Category Disambiguation Exercise

1a. Thematic-goal; Spatial-path-bounded; 1b. Thematic-recipient; 1c. Logical-purpose.

2a. Structural - required for infinitive clause; 2b. Thematic-recipient; 2c.Thematic-beneficiary; 2d. Logical-elaboration or Theme-basic (links what is needed...); 2e. Logical-reason (dated British usage); 2f. Logical-reason.

3a. Spatial-path-directional; 3b. Logical-elaboration; 3c. Logical-approximation; 3d. Spatial-path-unbounded/directional.

4a. Coreference-possessive; Coreference-personal relation contracted with an Identificational-attributive relation; Coreference-demonstrative.

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Text Profiles
in
English Language Connectivity

(Pre-publication Sample Exercises)

by

Cynthia A. Caswell

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EXERCISE 1: STRATEGIES FOR TEACHING

RECOMMENDED TIME: Minimum Total = approximately 30 minutes;
Individual Task = 7 minutes
In Class Corrections = 20 minutes
(More time necessary to analyze for patterns.)

EXERCISE TYPE: Rational Option Cloze

TEXT TYPE: INSTRUCTIONAL (Recommendations)

CROSS REFERENCE TO REGULAR COURSE MATERIALS:

THEME: Communication: verbal and nonverbal; Business, management skills

Critical Reading & Writing for Advanced ESL Students: *Chapter 6 - Process Analysis, Direction or Explanation.*

Guidelines: *Chapter 6 - Barriers (pg 59) Intercultural Communication Stumbling Blocks (pg 75)*

FEATURES OF THE TEXT:

- Verb forms and modal verbs - Instructive/Imperative Mood
- Participles (participial phrases) as sentence subject
- NONLITERAL-formulaic use of Prepositions in LOGICAL connectivity phrases
- FOCUS on LOGICAL & TEMPORAL relations

LEARNING OBJECTIVES:

Students will gain practise in **recognizing appropriate textual connectors** and structural patterns that contribute to the style/character of the instructional text type.

Students may learn to identify conceptual patterns behind grammatical errors that they make.

INTRODUCING THE EXERCISE:

In order to clarify the instructions at the head of the exercise, it may be valuable to work through the following or a similar type example with the class before they attempt this exercise.

1) Definition of connective words: function words; join ideas together, etc.

2) Short Example: Emphasize choosing the answer that makes sense for the story/text, not just an immediate sentence. (e.g. ***They*** turned and went into the hardware store - makes an acceptable sentence; however, the correct answer is ***he*** because the antecedent is one person and a man, Mr. Walsh.)

One day Mr. Walsh was walking down main street. Suddenly, (him, **he**, they) turned and went into the hardware store.

3) Discuss strategies for choosing right answers:

- work both sides of the gap
- pass over options where you can't decide and keep going
- re-read and self-correct

STUDENT PARTICIPATION:

- Individual Assignment: 7 minute time limit
- Group Work (optional): 10 minutes discussion and comparison of answers; 3 to 4 people per group; perhaps assign a specific paragraph to each group; depending how far the class got with the total assignment

OPTIONS FOR CORRECTING THE ASSIGNMENT:

- Use an OVERHEAD of the assignment and circle the correct options (either ahead of time or as the class works through it - depending on time). Discuss relation type behind errors and meaning loss, as necessary (e.g. on questions where a lot of the students made an incorrect choice).
- Use the ERROR PATTERN ANALYSIS sheet - either with the class or taking home and looking over the assignment to identify patterns in student error to focus on.
- POST THE ANALYSIS - allow students to self-correct and fill out the ERROR PATTERN ANALYSIS sheet; if they have more than 15% errors.
- Refer to handbook for other examples of the relation types used.

EXERCISE 1: INSTRUCTIONAL TEXT

Recommendations for improving interpersonal communication skills, is a modified text excerpt from Chapter 5, in *Management: Individual and Organizational Effectiveness*, Second Edition (Mescon, Albert & Khedouri, 1985).

Instructions: There are three options within each frame. Choose one option, only. Be careful to choose the option which fits best with the meaning of the text .

Improving Your Interpersonal Communication Skills

(For..In..As)[1] addition to developing effective listening skills, there (is..was..are)[2] other techniques (your..you..yours)[3] can use to improve your interpersonal communication effectiveness.

Clarify Your Ideas Before Communicating. (Clarifying..Clarified..Clarifies)[4] your ideas (behind..between..before)[5] communicating means that you (shall..should..may)[6] systematically think (through..threw..into)[7] and analyze the issues, problems, (on..or..ore)[8] ideas you want to communicate. Anytime you communicate (when..toward..with)[9] a superior, a subordinate, or co-worker, (he..you..they)[10] should basically have some theme you want (to..too..as)[11] communicate.

Be Sensitive to Potential Semantic Problems. (Trying..Try..Tried)[12] your best to avoid ambiguous words or statements. (In front..Instead..In case)[13] of saying, "Barbara, get this to me (at..for..as)[14] your earliest convenience," you can say, "Barbara, it's critical (this..there..that)[15] I get the report by Thursday morning. This will give (mine..me..my)[16] time to look it (under..around..over)[17] and contact you for any elaboration I (may..do..did)[18] need for the meeting I (has..have..had)[19] 9:00 Friday." Using words (then..there..that)[20] describe performance in specific rather (then..than..for)[21] general terms is very helpful.

Be Sensitive to (Which..What..Where)[22] *You Communicate Through Body Language and Tone (from..off..of)*[23] *Voice.* Be aware of (their..your..yours)[24] facial expressions, gestures, posture, and tone of voice (so..soon..still)[25] you do not send conflicting signals. (Tried..Trying...Try)[26] to see and hear (you..yourself..him)[27] in the same way the person you (have..are..were)[28] communicating with is seeing and hearing you. (When..By..Bye)[29] sending harmonious symbols (that..then..I)[30] don't convey conflicting messages, your messages should (been..being..be)[31] received with more clarity and understanding.

Use Empathy. Empathy is feeling (when..where..what)[32] other persons feel, (put..putting..putted)[33] yourself in (there..their..they're)[34] shoes. It is asking yourself, "(Why..Who..What)[35] is this person I want to reach? What (be..are..is)[36] her needs and interests? What kind (of..for..from)[37] mood is he in today?" Actively using empathy (when..into..in)[38] communication implies that (we..us..do)[39] try to accommodate the receiver and match (the..then..than)[40] way we encode and transmit to the individual or group and the situation. Successfully (use..using..useful)[41] empathy can greatly reduce the potential (to..for..by)[42] misunderstanding when the receiver (decoded..decode..decodes)[43] the message.

(At..As..For)[44] example, some people prefer a lot of structure, detail, (an..and..to)[45] repetition. We probably (wood..would..should)[46] reach such people (more..as..much)[47] effectively with a letter or (detail..detailed..detailing)[48] memorandum. (Others..other..each)[49] respond better to less structure and detail. (An..And..A)[50] informed conversation (mite..might..to)[51] be the most appropriate way to communicate to (then..their..them).[52] Some people are anxious or insecure (of..into..in)[53] certain situations, or respond badly to criticism. They (may..can..would)[54] selectively weed out or misunderstand suggestions for improvement (as..of..if)[55] they are not presented (in..from..to)[56] a supportive, diplomatic fashion. Empathy, also, means (one..on..it)[57] makes an honest attempt to see the situation, the issues, the problems, and so forth (for..from..in)[58] the other person's view point.

ANSWER KEY 1: After each number, the author's choice is stated, followed by the conceptual relation conveyed by the correct choice, and then the syntactic category and level (text, clause, sentence, phrase) of the word is listed.

1. **IN** - NONLITERAL-formulaic; Preposition; phrase level

2. **ARE** - TEMPORAL-location present; Tensed auxiliary; text level

3. **YOU** - THEMATIC-agent; COREFERENCE-personal; 2nd person pronoun - phrase level; text-level

4. **CLARIFYING** - MANNER-progressive (continuative); Verbal aspect marker
   *Participial phrase functions as sentence subject

5. **BEFORE** - TEMPORAL-chronological; Preposition; phrase level

6. **SHOULD** - PSYCHOLOGICAL-attitude; Instructive intent - direct recommendation; Mood-Subjunctive; Modal auxiliary; text level

7. **THROUGH** - NONLITERAL-idiomatic; Verb Particle; phrase level

8. **OR** - LOGICAL-disjunctive; Conjunction;phrase level

9. **WITH** - THEMATIC-associative; Preposition-phrase level

10. **YOU** - COREFERENCE-personal; 2nd person pronoun; phrase level

11. **TO** - LOGICAL-elaboration; Infinitive-marker in verbal compound; clause level

12. **TRY** - PSYCHOLOGICAL-attitude; LOGICAL-attemptive; Instructive intent - direct recommendation; Mood-Imperative; Verbal-base; text level

13. **INSTEAD** - LOGICAL-contradictive; Preposition; phrase level (foregrounded)

14. **AT** - NONLITERAL-formulaic; Preposition; phrase level

15. **THAT** - LOGICAL-elaboration; Subordinating conjunction; clause level

16. **ME** - THEMATIC-patient affected; COREFERENCE-personal; phrase/sentence level

17. **OVER** - NONLITERAL- idiomatic; Verb Particle - phrase level

18. **MAY** - PSYCHOLOGICAL-attitude; LOGICAL-potential; Intent: disclaimer; expresses weak probability or warning; Mood-Indicative; Modal auxiliary; text level

19. **HAVE** - THEMATIC-possessor; TEMPORAL-location-future; Tense-marked verb; present; sentence level (subordinate clause)

20. **THAT** - COREFERENCE-relative; (which - substitute); Subordinating conjunction; clause level

21. (rather) **THAN** - LOGICAL-contrastive; Preposition; phrase level

22. **WHAT** - COREFERENCE-relative;THEMATIC-patient affected; Relative pronoun; clause level & phrase level

23. **OF** - IDENTIFICATIONAL-attributive; Preposition (psuedo-genitive); phrase level

24. **YOUR** - COREFERENCE-possessive; 2nd person sg. possessive pronoun; phrase level

25. **SO** - LOGICAL-consequential; Subordinating conjunction; clause level

26. **TRY** - PSYCHOLOGICAL-attitude; LOGICAL-attemptive; Instructive intent: direct recommendation; Mood-Imperative; Verb-base; text level

27. **YOURSELF** - COREFERENCE-reflexive; 2nd person sg. reflexive, phrase level

28. **ARE** - TEMPORAL-location present; Tensed auxiliary; text level

29. **BY** - LOGICAL-means; Preposition; phrase level - foregrounded

30. **THAT** - COREFERENCE-relative; Subordinating conjunction; clause level

31. **BE** - TEMPORAL-discontinuous; PROMINENCE; Passive-marker - copula base - in complex passive; (required with foregrounding of 'messages' as subject); sentence level & text level FOCUS.

32. **WHAT** - COREFERENCE-relative;THEMATIC-patient affected; Relative pronoun - clause level & phrase level

33. **PUTTING** - MANNER-progressive (continuative); Verbal aspect marker; phrase level (parallel)

34. **THEIR** - COREFERENCE-possessive; 3rd pl. possessive pronoun; phrase level

35. **WHO** - COREFERENCE-question & personal; Question pro-form; sentence/phrase level

36. **ARE** - TEMPORAL-location present; Tense-marked copula - EXISTENCE; sentence level

37. (kind) **OF** - IDENTIFICATIONAL- specification; Preposition; phrase level

38. **IN** - NONLITERAL-formulaic; TEMPORAL-duration; Preposition; phrase level

39. **WE** - COREFERENCE-personal; THEMATIC-agent; LOGICAL-inclusive; 1st person plural pronoun; phrase level.

40. **THE** - DEFINITE reference; Article; phrase level

41. **USING** - MANNER-progressive (continuative); Participial phrase functions as sentence subject; phrase level

42. **FOR** (EXAMPLE) - NONLITERAL- formulaic;LOGICAL-exemplification; Preposition; phrase level

43. **DECODES** - TEMPORAL-location present; Verbal tense marking; sentence/text level

44. **FOR** - NONLITERAL-formulaic; Preposition; phrase level - foregrounded

45. **AND** - LOGICAL-additive; Coordinating conjunction; phrase level

46. **WOULD** - PSYCHOLOGICAL-attitude; Intent: disclaimer, weaker recommendation; LOGICAL-potential; Mood-Subjunctive; Modal auxiliary; text level

47. **MORE** - LOGICAL-comparative; COREFERENCE-quantitative; Proform- Limiting Adjective; phrase level

48. DETAILED - MANNER-completive functions as IDENTIFICATIONAL-attributive; Aspectually marked verb functions as Adjective; phrase level

49. OTHERS - COREFERENCE-personal; LOGICAL-comparative; Nominal pro-form; phrase level

50. AN - INDEFINITE-reference; Article; phrase level

51. MIGHT - PSYCHOLOGICAL-attitude; LOGICAL-potential; Intent: disclaimer, weaker recommendation; Mood-Subjunctive; Modal auxiliary; text level

52. THEM - COREFERENCE-personal; THEMATIC-patient affected; 3rd person plural pronoun - object; text/phrase level

53. IN - NONLITERAL-idiomatic; SPATIAL-containment; Preposition; phrase level

54. MAY - PSYCHOLOGICAL-attitude; LOGICAL-potential; Intent: disclaimer, weaker recommendation; Mood-indicative; Modal auxiliary; text level

55. IF - LOGICAL-conditional; Subordinating conjunction; clause level

56. IN (a...fashion) - NONLITERAL-formulaic; MANNER; Preposition; phrase level

57. ONE - COREFERNCE- gender indefinite; Nominal proform; phrase level

58. FROM - NONLITERAL-Idiomatic; THEMATIC-source; Preposition; phrase level

EXERCISE 2: STRATEGIES FOR TEACHING

RECOMMENDED TIME: Minimum Total Time= approximately 30 minutes;
Individual Task = 7 minutes
In Class Correction = 20 minutes
(More time necessary to analyze for patterns.)

EXERCISE TYPE: Rational Option Cloze

TEXT TYPE: JOURNALISM - Reporting on an Issue

CROSS REFERENCE TO REGULAR COURSE MATERIALS:

THEME: English language, Communication, Culture

Critical Reading & Writing for Advanced ESL Students: *Chapter 6 - Process Analysis, Direction or Explanation.*

Guidelines: *Chapter 6 - Intercultural Communication Stumbling Blocks (pg 75)*

FEATURES OF THE TEXT:

- Use of (completive, progressive - Aspect) Participles as Nouns or Adjectives (form/functions)
- Focus on COREFERENCE, MANNER, TEMPORAL relations

LEARNING OBJECTIVES:

Students will gain practise in **recognizing appropriate textual connectors** and structural patterns that contribute to the style/character of the journalistic-report text type.

Students may learn to identify conceptual patterns behind grammatical errors that they make.

INTRODUCING THE EXERCISE:

In order to clarify the instructions at the head of the exercise, it may be valuable to work through the following or a similar type example with the class before they attempt this exercise. (Use a different example or remind them of the exercise type if they have done Exercise One.)

1) Definition of connective words: function words; join ideas together, etc.

2) Short Example: Emphasize choosing the answer that makes sense for the story/text, not just an immediate sentence. (e.g. ***They*** turned and went into the hardware store - makes an acceptable sentence; however, the correct answer is ***he*** because the antecedent is one person and a man, Mr. Walsh.)

One day Mr. Walsh was walking down main street. Suddenly, (him, **he**, they) turned and went into the hardware store.

3) Discuss strategies for choosing right answers:

- work both sides of the gap
- pass over options where you can't decide and keep going
- re-read and self-correct

STUDENT PARTICIPATION:

- Individual Assignment:	7 minute time limit
- Group Work (optional):	10 minutes discussion and comparison of answers; 3 to 4 people per group; perhaps assign a specific paragraph to each group; depending how far the class got with the total assignment

OPTIONS FOR CORRECTING THE ASSIGNMENT:

- Use an OVERHEAD of the assignment and circle the correct options (either ahead of time or as the class works through it - depending on time). Discuss relation type behind errors and meaning loss, as necessary (e.g. on questions where a lot of the students made an incorrect choice).
- Use the ERROR PATTERN ANALYSIS sheet - either with the class or taking home and looking over the assignment to identify patterns in student error to focus on.
- POST THE ANALYSIS - allow students to self-correct and fill out the ERROR PATTERN ANALYSIS sheet; if they have more than 15% errors.
- Refer to handbook for other examples of the relation types used.

EXERCISE 2: JOURNALISM (Report on an Issue)

This exercise is based on an excerpt from the article **The English-only debate,** written by Andrew Phillips, published in *McLean's* magazine (May 5, 1997).

Instructions: There are three options within each frame. Choose one option, only. Be careful to choose the option which fits best with the meaning of the text .

The English-only debate

To the extent (then..that..when)^{1} Canada impinges on the consciousness of Americans -- (witch..since..which)^{2} is not much at all -- it (is..as..has)^{3} mainly as a pretty nice place. Polite folks, generous social services, good fishing: (what..that's..how)^{4} about it. So it's a bit (of..for..from)^{5} a shock to find that (in..on..to)^{6} some quarters Canada is held (off..out..on)^{7} as a warning of the road *not* to take. The plush Washington offices (from..off..of)^{8} U.S. English, the biggest lobby group dedicated to (make..making..makes)^{9} English the official language of the United States, is one (much..such..of)^{10} place. On one wall hangs a (framing..framed..frame)^{11} copy of a magazine ad showing North America fragmenting, (when..without..with)^{12} Quebec breaking off in (a..one..on)^{13} direction, Texas in another. "It can't happen (there..hear..here):^{14} *or can it?*'" it reads ominously, (as..with..when)^{15} the explanation that official bilingualism (into..in..at)^{16} Canada has meant "billions" of (wasted..wasting..wastes)^{17} tax dollars, slower growth (an..and..another)^{18} "a populace bitterly divided on the issue." The message (to..is..has)^{19} clear: language means trouble.

The United States has (any..many..less)^{20} problems, but language, it (will..wood..would)^{21} seem, is not one of (theirs..then..them).^{22} Census figures show that 97 per cent of Americans (under..over..from)^{23} the age of five are fluent in English, (and..or..an)^{24} most people would agree that speaking English is one of (them..those..these)^{25} things, like a love of cars and (an..a..all)^{26} aversion to government, (what..to..that)^{27} makes Americans ...Americans. But look (over..again..away).^{28} Just below the surface, language is a hot issue. The United States is experiencing (its..it's..a)[29] biggest wave of immigration (sense..since..while)[30] the turn of the century; 32 million Americans speak a language other (then..than..to)[31] English at home, and surveys show more (with..and..in)[32] more people expressing frustration that (I..they..we)[33] just can't make (themselves..himself..myself)[34] understood when they take a cab (nor..to..or)[35] order a burger. Twenty-three states -- from California (threw..through..as)[36] much of the West to the entire South -- (having..has..have)[37] adopted laws declaring English (there..their..they're)[38] official language. ...

U.S. English has (rode..ride..ridden)[39] that wave, and helped (too..to..two)[40] create it as well. It is led (buy..bye..by)[41] a personable and energetic architect, 56-year-old Mauro Mujica, (whom..who..whose)[42] may be the perfect person (have..to..will)[43] sell the message. Mujica came to the United States (front..from..form)[44] Chile as a 23-year-old student. He (must..had..will)[45] to learn English to succeed in America, and (as..like..when)[46] a Hispanic he can hardly (be..been..bee)[47] accused of bias (against..again..for)[48] the countries biggest non-English speaking group. Mujica preaches a (classy..classic..classical)[49] American value: the melting pot. ...(Those..Them..These)[50] who want (all..a..the)[51] government to promote their Spanish heritage (to..at..by)[52] the expense of English, (his..he..him)[53] says, are condemning (their..there..my)[54] children to be busboys and gardeners. (At..In..Into)[55] America, English is the (undispute..undisputed..undisputing)[56] language of success.

ANSWER KEY 2: Answers are based on the author's original text.

1. THAT - COREFERENCE-relative (substitute for WHICH); LOGICAL-elaborative; NONLITERAL-formulaic: *to the extent which (that) something happens;* Structural Subordinator; Relative Proform; clause level

2. WHICH - COREFERENCE-relative; parallel to THAT in earlier clause, but note the stylistic alternation between the two forms; Relative Proform; clause level

3. IS - TEMPORAL-location present; IDENTIFICATIONAL-attributive; 3rd person singular: Copula - to be; text/sentence-level

4. THAT'S - COREFERENCE-demonstrative; Demonstrative-proform; contracted with TEMPORAL-location Copula - to be; NONLITERAL-idiomatic *that's about it* means *that's all, nothing more.*

5. (a bit) OF - NONLITERAL-formulaic; in this case it means *small;* literally it means a small part of something. Preposition; phrase level

6. IN - SPATIAL-location; Preposition, phrase level

7. (held) OUT - SPATIAL-directional; Particle with phrasal verb; phrase level

8. OF - THEMATIC-possessor; Preposition; phrase level

9. MAKING - the MANNER-progressive Aspect marked -ING form is required to indicate the EVENT to which the group is dedicated. Expression *dedicated to something (a cause, a group, a movement).*

10. SUCH - IDENTIFCATIONAL-instance of; means *kind of of a prespecified type;* Proform as Adjective, phrase level

11. FRAMED - MANNER-completive Aspect marked -ED form of the verb is allowed to function as an Adjective; phrase level

12. WITH - MANNER-basic (explains how North America is fragmenting); Preposition; phrase level

13. ONE - COREFERENCE-numeric/demonstrative functions as a PROPERTY (contrasts with another); Proform/Adjective; phrase level

14. HERE - COREFERENCE-demonstrative (THIS PLACE); Adverb; phrase level

15. WITH - THEMATIC-associative; (the explanation accompanies the headline); Preposition; phrase level

16. IN - SPATIAL-location; Preposition; phrase level

17. WASTED - MANNER-completive Aspect marked -ED form of the verb is allowed to function as an Adjective; phrase level

18. AND - LOGICAL-additive; Conjunction; phrase level

19. IS - TEMPORAL-location- present; IDENTIFICATIONAL-attributive; 3rd person singular: Copula - to be; sentence/phrase level

20. MANY - COREFERENCE-indefinite quantity; Pro-form/Adjective; phrase level

21. WOULD - PSYCHOLOGICAL-attitude - doubt; Subjunctive Mood - MODAL-auxiliary; sentence level

22. **THEM** - COREFERENCE-impersonal; 3rd person plural Object Proform - Nominal. text/sentence level

23. **OVER** - SPATIAL-direction/LOGICAL-comparative - (older than); Preposition; phrase level

24. **AND** - LOGICAL-additive; Conjunction; sentence level

25. **THOSE** - COREFERENCE-demonstrative; Demonstrative-plural Proform/Adjective; phrase level

26. **AN** - Reference-indefinite; requires an because the noun *aversion* begins with a vowel; phrase level

27. **THAT** - COREFERENCE-relative (alternate for WHICH); Structural Subordinator; clause level

28. **AGAIN** - MANNER-repetitive; Adverb; phrase level

29. **ITS** - COREFERENCE-impersonal, possessive; 3rd person singular, Proform/Limiting Adjective

30. **SINCE** - TEMPORAL-location; Preposition, phase level

31. **(other) THAN** - LOGICAL-contrastive; Conjunction; phrase level

32. **AND** - LOGICAL-additive; Conjunction; phrase level

33. **THEY** - COREFERENCE-personal; 3rd person plural Subject Pro-form/Noun Phrase, text/sentence level

34. **THEMSELVES** - COREFERENCE- reflexive; 3rd person plural reflexive Proform/Noun Phrase; Object Position; sentence-internal

35. **OR** - LOGICAL-disjunctive; Conjunction; phrase level

36. **THROUGH** - SPATIAL-path-extent; Preposition; phrase level

37. **HAVE** - TEMPORAL-location - past; Auxiliary verb in MANNER-completive action (have adopted); sentence level

38. **THEIR** - COREFERENCE-possessive; 3rd person plural possessive Proform/Limiting Adjective; sentence level

39. **RIDDEN** - MANNER-completive; NONLITERAL-idiomatic - *to ride the wave* means to participate in a social movement; Aspect marker -en on the main verb indicates a completed action; sentence level

40. **TO** - INFINITVE-marker; structural link in compound verb phrase *help to do something*.

41. **BY** - THEMATIC-agent; Preposition; phrase level (Passive form)

42. **WHO** - COREFERENCE-relative/personal; Relative Proform; clause level

43. **TO** - NONLITERAL-formulaic; *the (right/perfect) person to do something;* INFINITIVE-marker - LOGICAL-purpose/goal. The person has the right characteristics to achieve the goal

44. **FROM** - SPATIAL-direction;THEMATIC-source; Preposition; phrase level

45. **HAD** - NONLITERAL-idiomatic - *to have to do something;* PSYCHOLOGICAL-attitude-LOGICAL-obligatory; with TEMPORAL-location-past; sentence-level

46. **AS (a Hispanic)** - IDENTIFICATIONAL-instance-of; NONLITERAL-formulaic; Particle/Preposition; phrase level (foregrounded).

47. **BE** - FOCUS - Base of Copula in Modal Passive Verb Form: *can be accused;* passive form keeps Mujica (he) as subject of the parallel sentence.

48. **AGAINST** - THEMATIC-associative; Preposition; phrase level

49. **CLASSIC** - All three of the forms are adjectives but only 'classic' is correct for 'value'; *classical music, a classy dress, etc.*

50. **THOSE** - COREFERENCE-demonstrative; Demonstrative Plural Pro-form/Nominal; text level - means *anyone*

51. **THE** - Reference-definite; the antecedent is the United States - this refers specifically to the American government

52. **AT (the expense of someone/something)** - NONLITERAL-idiomatic; Preposition; phrase level

53. **HE** - COREFERENCE-personal; 3rd person singular Proform/Nominal; text/phrase level

54. **THEIR** - COREFERENCE-possessive; 3rd person plural Proform/Limiting Adjective; text/sentence/phrase level

55. **UNDISPUTED--** MANNER-completive; Aspect marked -ED form of the verb is allowed to function as an Adjective; phrase level

EXERCISE 3: STRATEGIES FOR TEACHING

RECOMMENDED TIME: Total Time = approximately 45 minutes;
Individual Task = 15 - 20 minutes.
In Class Correction = 20 - 30 minutes

EXERCISE TYPE: Rational Cloze

TEXT TYPE: NARRATIVE-DESCRIPTIVE (to support a position in Argument/Persuasion)

CROSS REFERENCE TO REGULAR COURSE MATERIALS:

THEME: Homeland; Origins; Childhood Experience; Nature

Critical Reading & Writing
for Advanced ESL Students: *Chapter 6 - Organizing Time & Space. Chapter 4 - Description;*
Chapter 8 - Persuasion (Description in support of Opinion)
Guidelines: *Chapter 6 - Intercultural Communication Stumbling Blocks (pg 75)*

FEATURES OF THE TEXT:

- a very rich range of relational features mark the narrative-descriptive text-type
- SPATIAL, TEMPORAL, LOGICAL, COREFERENCE relations

LEARNING OBJECTIVES:

Students will gain practise in **producing appropriate textual connectors** and structural patterns that contribute to the style/character of the instructional text type.

Students may learn to identify conceptual patterns behind grammatical errors that they make.

INTRODUCING THE EXERCISE:

The instructions for the rational cloze (rational = focus on connectivity, rather than random word deletions) are fairly straightforward: FILL IN THE BLANKS. However, emphasis on the fact that the words that are missing are CONNECTIVE WORDS may be appropriate.

STUDENT PARTICIPATION:

- Individual Task: 15 - 20 minutes
- Group Work: 20 minutes; in groups of 2 or 3;
  THIS CAN BE THE MAIN APPROACH TO THE EXERCISE RATHER THAN FOLLOW UP.
- Whole Class Task: 30 - 40 minutes; individuals suggest options; work through it on an overhead
  with the whole group; then no corrections are required.

OPTIONS FOR CORRECTING THE ASSIGNMENT:

- Use an overhead, and either fill in the options ahead of time or as students suggest answers.
- Post the answers and have students do self-correction or PATTERN ANALYSIS, if errors over 15%.
- Refer to handbook for other examples of the relation types used.

EXERCISE 3: NARRATIVE-DESCRIPTIVE TEXT

This exercise is based on an abridge text excerpt from an essay, **Where the World Began,** (1971) by Margaret Laurence. Her essay includes an argument against the stereotypical description of the Canadian prairies, expressed in terms like "dull, bleak, flat". Her description of her hometown and its environs is written from the perspective of her childhood and is intended to persuade the reader of the multifaceted beauty of the prairies.

Instructions: Connective words join the ideas in a text together. Any grammatical category can be a connective word, so long as its meaning shows a relationship between ideas (e.g. spatial, logical, temporal relations, etc.) or the attitude of the author to the text or the audience. Some of the connectives in this text have been deleted. Fill in the blanks to complete the description.

Where the World Began

A strange place it was, that place where the world began. A place of incredible happenings, splendors and revelations, despairs like multitudinous pits of isolated hells. A place of shadow-spookiness, inhabited by the unknowable dead. A place of jubilation and of mourning, horrible and beautiful.

It was, in fact, a small prairie town.

Towns like ours, set in a sea of land, ______ (1) been described thousands of times _______ (2) dull, bleak, flat, uninteresting. ...All that I can say is -- well, ______ (3) really have to live there to know _______ (4) country. The town of my childhood ________ (5) be called bizarre, agonizingly repressive __________ (6) cruel at times, and the land in ________ (7) it grew could be called harsh in the violence of ________ (8) seasonal changes. But never merely flat or uninteresting. ________ (9) dull.

In winter, we ________ (10) to hitch rides on the back of the milk sleigh, _______ (11) moccasins squeaking and slithering ________ (12) the hard rutted snow of the roads, our hands in ice-bubbled mitts hanging _______ (13) the box edge of the sleigh for dear life, ________ (14) Bert grinned at us __________ (15) his great frosted moustache and shouted _______ (16) horses into speed, daring us to stay put. ________ (17) mornings, rising, there would be the perpetual fascination _______ (18) the frost feathers on windows, the ferns _______ (19) flowers and eerie faces traced there ________ (20) the night by unseen artists of the wind. Evenings, coming back _______ (21) skating, the sky would be black ________ (22) not dark, for you could see a cold glitter of stars ________ (23) one side of the earth's rim to the ________ (24). And then the sometime astonishment ________ (25) you saw the Northern Lights flaring _______ (26) the sky, like the scrawled signature of God. ________ (27) a blizzard, when the snow ploughs hadn't yet got _________ (28), school would be closed for the day, the assumption _______ (29) that the town's young could not ________ (30) flounder through five feet of snow in the pursuit of education. We _________ (31) then gaily don snowshoes and flounder for miles out ______ (32) the white dazzling deserts, in pursuit of a different kind of knowing. _______ (33) you came back too close to night, through the woods _______ (34) the foot of the town hill, the thin black branches of poplar and chokecherry now meringued _______ (35) frost, sometimes you heard coyotes. Or ______ (36) the banshee wolf-voices were really only inside your head.

Summers ________ (37) scorching, and when no rain came and the wheat became bleached and dried ________ (38) it headed, the faces of farmers and townsfolk would not smile ________(39), ... The Drought and Depression were like evil deities _________ (40) had been there always. You understood and you did _______ (41) understand.

Yet the outside world had ________ (42) continuing marvels. The poplar bluffs and the small river ________ (43) filled and surrounded with a zillion different, grasses, stones, and weed flowers. The meadowlarks sang undaunted _______(44) the twanging telephone wires _______ (45) the gravel highway. Once we found _______ (46) old flat-bottomed scow, and launched her, poling _______ (47) the shallow brown waters, mending her _______ (48) wodges of hastily chewed Spearmint, grounding her _______ (49) the tangles of soft yellow marsh marigolds _________ (50) grew succulently along the banks of the shrunken river. _______ (51) the sun made our skins smell dusty-warm. ...

This was my territory from the time of my youth, and in a sense my life since ________ (52) has been an attempt to look _______ (53) it, to come to terms with it. Stultifying to the mind it certainly could be, and sometimes was, _________ (54) not to the imagination. It was _________ (55) things, but it was never dull.

ANSWER KEY 3: The following answers are based on the author's choice of words. In some cases, there may be other alternatives which would be acceptable. Be prepared to discuss alternatives provided by the students.

1. **HAVE** - TEMPORAL-location-past; Auxiliary Verb in passive construction; text level

2. **AS** - LOGICAL-elaboration; IDENTIFICATIONAL-attributive; Adverbial particle; phrase level.

3. **YOU** - COREFERENCE-personal; 2nd person singular; Pronoun; phrase level

4. **THAT** - COREFERENCE-demonstrative; Demonstrative Proform as Limiting Adjective; antecedent for *that country* is "sea of land".

5. **COULD** - LOGICAL-possibility; TEMPORAL-location-past; Modal auxiliary; text-level (tense)

6. **OR** - LOGICAL-disjunctive; Conjunction; phrase level

7. **WHICH** - COREFERENCE-relative; Relative-pronoun; clause level

8. **ITS** - COREFERENCE-impersonal/possessive; 3rd person impersonal Pronoun; antecedent within sentence level

9. **NEVER** - LOGICAL-negation; Adverbial Particle; phrase level

10. **USED** - MANNER-habitual; TEMPORAL-location-past; Main verb; text level

11. **OUR** - COREFERENCE-possessive; 1st person plural possessive Pronoun; antecedent within sentence level

12. **ON** - SPATIAL-location; Preposition; phrase level

13. **ONTO** - SPATIAL-location-attachment; THEMATIC-goal; Compound Preposition; phrase level

14. **WHILE** - TEMPORAL-simultaneous; Adverbial Subordinating Conjunction; clause level

15. **THROUGH** - SPATIAL-path-route; Preposition; phrase level

16. **THE** - REFERENCE-definite; Article; phrase level

17. **THOSE** - COREFERENCE-demonstrative; Demonstrative Plural Pronoun; text level - agrees with general past time in text.

18. **OF - (alternative WITH)** - THEMATIC-basic (stimulus); Preposition; phrase level

19. **AND** - LOGICAL-additive; Coordinating Conjunction; phrase level

20. **DURING** - TEMPORAL-duration; Preposition; phrase level.

21. **FROM** - THEMATIC-source; Preposition; phrase level

22. **BUT** - LOGICAL-contradictive/concessive; Coordinating Conjunction; phrase level

23. **FROM** - THEMATIC-source; implicit SPATIAL-path (from one... to the other) in context; Preposition; phrase level

24. **OTHER** - COREFERENCE-indefinite; demonstrative; Pronoun; phrase level

25. **WHEN** - TEMPORAL-location; Adverbial Subordinating Conjunction; clause level

26. **ACROSS** - SPATIAL-distribution; Preposition; phrase level

27. **AFTER** - TEMPORAL-chronological; Preposition; phrase level

28. **THROUGH** - SPATIAL-path-route; Adverbial particle - Phrasal verb - *get through something;* phrase level

29. **BEING** - IDENTIFICATIONAL-equivalence; MANNER-progressive; Verb participle; sentence level

30. **POSSIBLY** - LOGICAL-possibility; Adverb (phrase); sentence level

31. **WOULD** - PSYCHOLOGICAL -volitional;LOGICAL-hypothetical; Modal Auxiliary; sentence level

32. **INTO** - SPATIAL-path-directional; THEMATIC-goal; Compound Preposition; phrase level

33. **IF** - LOGICAL-conditional; Adverbial Subordinating Conjunction; clause level

34. **AT** - SPATIAL-location; Preposition; phrase level

35. **WITH** - THEMATIC-basic (substance); Preposition/Particle; phrase level (meringed with - unique expression)

36. **MAYBE (alternate - perhaps)** - PSYCHOLOGICAL-doubt/disclaimer; LOGICAL-potential; Adverbial particle, sentence/clause level.

37. **WERE** - TEMPORAL-location-past; IDENTIFICATIONAL-attributive; Verb-copula; text/sentence level

38. **BEFORE** - TEMPORAL-chronological; Adverbial Subordinating Conjunction; clause level

39. **MUCH** - COREFERENCE-numeric/quantifier - indefinite; Adverbial particle; phrase level

40. **WHICH (alternative - THAT)** - COREFERENCE-relative; Relative pronoun; clause level

41. **NOT** - LOGICAL-negation; Adverbial Particle; sentence level

42. **ITS** - COREFERENCE-impersonal/possessive; 3rd person singular neuter, Possessive Pronoun; antecedent within the sentence level.

43. **WERE** - TEMPORAL-location-past. Auxiliary Verb. text level

44. **FROM** (on top - implicit) - SPATIAL-location/proximity; Preposition; phrase level

45. **ALONG** - SPATIAL-distribution; Preposition; phrase level

46. **AN** - REFERENCE-indefinite; Indefinite Article; phrase level

47. **ALONG** - SPATIAL-path-route; (route implicit in the path of the waterway); Preposition; phrase level

48. **WITH** - THEMATIC-instrumental; MANNER-basic; Preposition; phrase level

49. **AMONG (alternative - IN)** - SPATIAL-location-contact; Preposition/Particle; phrase level

50. **THAT (alternative - WHICH)** - COREFERENCE-relative; STRUCTURAL-subordinating conjunction - alternates with WHICH; clause level

51. **WHILE** - TEMPORAL-simultaneous; Adverbial Subordinating Conjunction; clause level

52. **THEN** - COREFERENCE-demonstrative; Adverbial particle. Phrase level.

53. **AT** - SPATIAL-path-directional; Preposition - Phrasal verb (look at); phrase level

54. **BUT** (NOT) - LOGICAL-contradiction; Coordinating Conjunction; phrase level

55. **MANY** - COREFERENCE-numeric/quantifier; Proform - Limiting Adjective (Indefinite); phrase level.

EXERCISE 4: STRATEGIES FOR TEACHING

RECOMMENDED TIME: Total Time = approximately 45 minutes;
Individual Task = 15 - 20 minutes
In Class Correction = 20 - 30 minutes

EXERCISE TYPE: Rational Cloze

TEXT TYPE: DESCRIPTIVE JOURNALISM (Research Report)

CROSS REFERENCE TO REGULAR COURSE MATERIALS:

THEME: Archeology - Murals of Cacaxtal, Mesoamerican Culture; Ancient Wars; Popular Science

Critical Reading & Writing
for Advanced ESL Students: *Chapter 4 - Description; (Chapter 3 - Narration)*

Guidelines: *Chapter 20 - Research on Essays (Readings - War theme)*

FEATURES OF THE TEXT:

- Journalism is a type of narrative writing; these reports on the finds in Cacaxtla involve a high degree of excellent description with a rich mix of several relational types.
- COREFERENCE, LOGICAL, TEMPORAL, MANNER, SPATIAL, THEMATIC, NONLITERAL-formulaic relations are integrated in this text
- Parallel structure: phrases, participial phrases
- Excellent choice of vocabulary: adjectives, verbs

LEARNING OBJECTIVES:

Students will gain practise in **producing appropriate textual connectors** and structural patterns that contribute to the style/character of the instructional text type.

Students may learn to identify conceptual patterns behind grammatical errors that they make.

INTRODUCING THE EXERCISE:

The instructions for the rational cloze (rational = focus on connectivity, rather than random word deletions) are fairly straightforward: FILL IN THE BLANKS.

However, emphasis on the fact that the words that are missing are CONNECTIVE WORDS may be appropriate.

STUDENT PARTICIPATION:

- Individual Task: 15 - 20 minutes
- Group Work: 20 minutes; in groups of 2 or 3;
  THIS CAN BE THE MAIN APPROACH TO THE EXERCISE RATHER THAN FOLLOW UP.
- Whole Class Task: 30 - 40 minutes; individuals suggest options; work through it on an overhead with the whole group; then no corrections are required.

OPTIONS FOR CORRECTING THE ASSIGNMENT:

- Use an overhead, and either fill in the options ahead of time or as students suggest answers.
- Post the answers and have students do self-correction or ERROR PATTERN ANALYSIS, if errors over 15%.
- Refer to handbook for other examples of the relation types used

EXERCISE 4: DESCRIPTIVE JOURNALISM

This text excerpt is from a popular science article, **Mural Masterpieces of Ancient Cacaxtla**, in *National Geographic, September 1992.* It describes the vivid murals discovered at an archeological dig between Mexico City and Puebla. The murals provide extensive insights into ancient Mesoamerican war and religious rituals.

Instructions: Connective words join the ideas in a text together. Any grammatical category can be a connective word, so long as its meaning shows a relationship between ideas (e.g. spatial, logical, temporal relations, etc.) or the attitude of the author to the text or the audience. Some of the connectives in this text have been deleted. Fill in the blanks to complete the description.

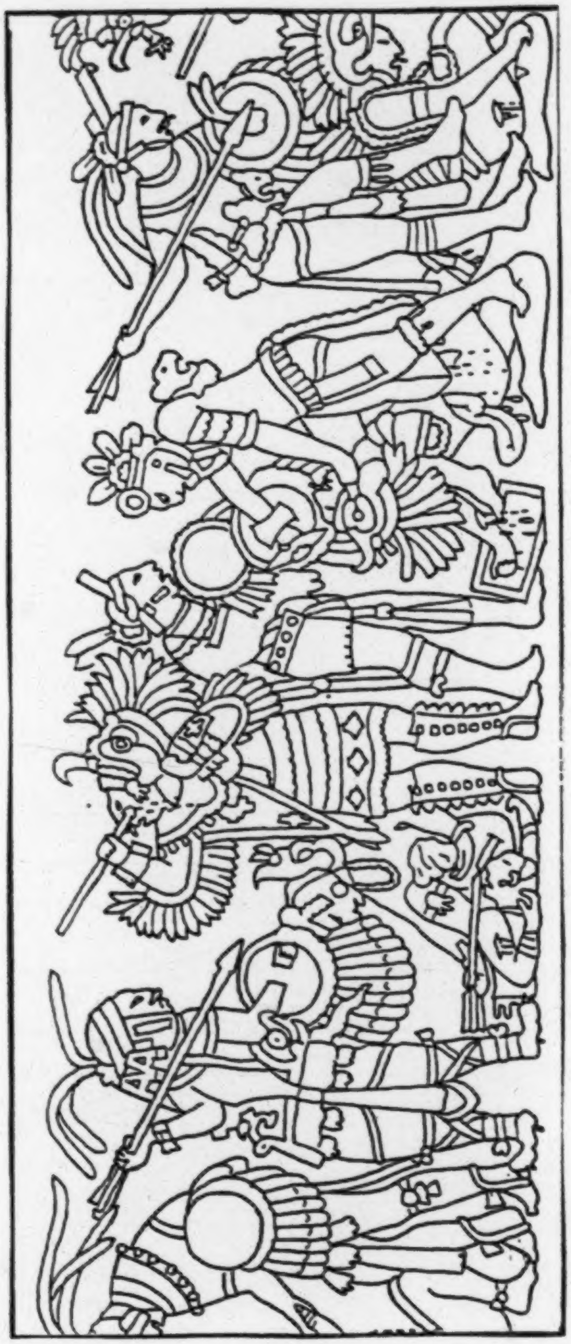
Mural Masterpieces of Ancient Cacaxtla

The jaguar warriors are the obvious winners in the violent encounter with the soldiers dressed as birds. Clothed in tailored pelts arrayed with lavish insignia of rank, grimacing with exertion, ______________ (1) drive flint-sharp lances into the bodies of the bird men, ______________ (2) are unarmed. Many of the vanquished already sprawl ______________ (3) grotesque poses of abject disarray, __________ (4) blood falling in vivid red droplets from hideous wounds. ______________, (5) disemboweled in the action, clutch in vain ______________ (6) their exposed entrails. Gazing ______________ (7) the frightful scene, one can practically hear the cries ______________ (8) triumph mixed with the moans of the disgraced -- even __________ (9) the chasm of time, for more ______________ (10) a thousand years have passed ______________ (11) the lurid spectacle was painted.

______________ (12) I first heard about the murals found ______________ (13) Cacaxtla, a small archeological site ______________ (14) 80 miles east of Mexico City, the news of ______________ (15) miraculous preservation and rich content seemed far ______________ (16) good to be true. ______________ (17) more than 15 years of excavation have revealed ______________ (18) additional murals, each seemingly more magnificent __________ (19) the last. They have provided us ______________ (20) a unique window into the sometimes violent world ____________ (21) the elite warrior merchants of seventh - ______________ (22) - tenth century highland Mexico _______________ (23) the tumultuous times in _______________ (24) they lived and died.

Many things in ______________ (25) world seem strange to us. For example, war was most _______________ (26) waged not only for territorial gain but _______________ (27) for the procurement of captives _______________ (28) sacrifice. Given the 1,100 - year cultural gulf _______________ (29) the Cacaxtlans and us, it is ______________ (30) surprizing that the painted scenes are often not ________________ (31) they seem at first glance. The "battle" ____________ (32) the jaguar and bird warriors, __________ (33) it turns out, may not be a battle ____________ (34) all but a postwar sacrificial ceremony performed on a public stage. ...

War icons, ____________ (35) unexpectedly, appear in the scene _____________ (36) well -- a screech owl, blood glyphs, ________________ (37) a disjointed and blood-spotted human femur. ________________ (38) dominating the whole are the venus symbols, ______________ (39) entire family of elements _______________ (40) in one way or ______________ (41) represent the celestial body intimately associated _________________ (42) the grandiose rituals of Mesoamerican war ________________ (43) sacrifice. To the Maya, Venus was *xux ek,* the dread "wasp star," _______________ (44) appearance controlled the scheduling ____________ (45) military raids.



ANSWER KEY 4: Answers are based on the author's original choices. There are other alternatives; be prepared to discuss them with the students.

1. **THEY** - COREFERENCE-personal; 3rd person plural Proform/Subject Noun Phrase;text/phrase level (antecedent = jaguar warriors/winners).

2. **WHO** - COREFERENCE-personal; Relative Pronoun; clause/sentence level (antecedent = the bird men)

3. **IN** - NONLITERAL-formulaic; to be ***in*** a certain state (in this case, poses of disarray); Preposition; phrase level

4. **THEIR** - COREFERENCE-possessive; 3rd person plural possessive Proform/Limiting Adjective, text/phrase level (antecedents = they, the bird men)

5. **SOME** - COREFERENCE-indefinite/quantifier. Pro-form as Noun Phrase; text level, antecedent = "many of **the vanquished**"

6. **AT** - NONLITERAL-formulaic; Particle for phrasal verb *clutch at;* phrase level

7. **UPON** - (alternate AT) - NONLITERAL-formulaic; SPATIAL-path-directional; Particle in phrasal verb: *gaze upon/at something,* phrase level

8. **OF** - IDENTIFICATIONAL-instance-of (the type of cry); Preposition; phrase level

9. **ACROSS** - NONLITERAL- TEMPORAL use of SPATIAL-location, Preposition, phrase level

10. **THAN** - LOGICAL-comparative; Conjunction; phrase level

11. **SINCE** - TEMPORAL-location-past; Subordinating Adverb; clause level

12. **WHEN** - TEMPORAL-location; Subordinating Adverb, text/clause level (clause is foregrounded)

13. **AT (IN - Alternative)** - SPATIAL-location; Preposition; phrase level

14. **SOME (ABOUT, NEARLY - Alternatives)** - LOGICAL-approximation; Indefinite Proform/Adverbial Particle; phrase level

15. **THEIR** - COREFERENCE-impersonal; 3rd person plural Proform/Limiting Adjective; sentence/phrase level (antecedent = murals).

16. **TOO** - LOGICAL-intensification (excess); Adverbial particle; phrase level

17. **NOW** - TEMPORAL-location; Adverbial- particle, Text/sentence level.

18. **MANY** - COREFERENCE-numeric/quantity; Indefinite Proform/Limiting Adjective; phrase level

19. **THAN** - LOGICAL-comparative; Conjunction; phrase/sentence level

20. **WITH** - NONLITERAL-formulaic; Preposition with Phrasal verb: *provide someone with something,* phrase level

21. **OF** - THEMATIC-possessor; Preposition; phrase level

22. **TO** - TEMPORAL-duration; Preposition in compound expression; phrase level

23. **AND** - LOGICAL-additive; Conjunction; joins complex noun phrases - phrase level

24. **WHICH** - COREFERENCE- relative; Relative pronoun; clause level

25. **THAT** - COREFERENCE-demonstrative; Demonstrative-singular- Proform/Limiting Adjective; phrase level

26. **OFTEN** - MANNER-frequentive; Adverb; phrase level

27. **ALSO** - LOGICAL-additive; Adverbial particle; phrase level (but also)

28. **FOR** - LOGICAL-purpose; Preposition; phrase level

29. **BETWEEN** - NONLITERAL-metaphor; SPATIAL-location: *cultural gulf between;* Preposition, phrase level

30. **NOT** - LOGICAL-negation; Adverbial particle; sentence level

31. **WHAT** - COREFERENCE-relative; Relative-pronoun; clause level

32. **BETWEEN** - THEMATIC-associative; Preposition; phrase level

33. **AS** - MANNER-basic; Subordinating adverb, clause level

34. **AT (all)** - NONLITERAL-idiomatic; Preposition, phrase level

35. **NOT** - LOGICAL-negation/contradiction; Adverbial particle, phrase level

36. **AS (well)** - entire phrase is LOGICAL-additive; Adverbial Particle, clause level

37. **AND** - LOGICAL-additive; Conjunction; phrase level

38. **BUT (HOWEVER - Alternative)** - LOGICAL-contrastive; Conjunction; clause/text level

39. **AN** - Reference-indefinite; Indefinite Article; AN - because the adjective *entire* begins with a vowel

40. **THAT** - (alternate WHICH) COREFERENCE-relative; Structural Subordinator; clause level

41. **ANOTHER** - COREFERENCE-impersonal/demonstrative; Indefinite Proform/Limiting Adjective

42. **WITH** - THEMATIC-associative; Preposition; Phrase level

43. **AND** - LOGICAL-additive; Conjunction; phrase level

44. **WHOSE** - COREFERENCE-relative/possessive; Relative(possessive) pronoun; clause level

45. **OF** - THEMATIC-patient-affected; (Nominalized event structure) Preposition; phrase level

EXERCISE 5: STRATEGIES FOR TEACHING

RECOMMENDED TIME: Total Time = approximately 30 minutes;
Individual Task = 9 minutes
In Class Corrections = 20 minutes
(More time necessary to analyze for patterns.)

EXERCISE TYPE: Rational Option Cloze

TEXT TYPE: ARGUMENT/PERSUASION

CROSS REFERENCE TO REGULAR COURSE MATERIALS:

THEME: World Hunger; Politics/War; Research on International Problems

Critical Reading & Writing for Advanced ESL Students: *Chapter 8 - Logical Argument: The Heart of Critical Thinking.*

Guidelines: *Chapters 19 & 20 - writing on a research issue; developing and argument/conclusion*

FEATURES OF THE TEXT:

- Clause level connectives (subordinators)
- Mood and Modal auxiliaries: PSYCHOLOGICAL-relations
- Focus on: LOGICAL, COREFERENCE, TEMPORAL, and MANNER relations

LEARNING OBJECTIVES:

Students will gain practise in **recognizing appropriate textual connectors** and structural patterns that contribute to the style/character of the instructional text type.

Students may learn to identify conceptual patterns behind grammatical errors that they make.

INTRODUCING THE EXERCISE:

In order to clarify the instructions at the head of the exercise, it may be valuable to work through the following or a similar type example with the class before they attempt this exercise. (If the students have already completed a RATIONAL OPTION CLOZE exercise, then refer to the previous exercise or create a different example.)

1) Definition of connective words: function words; join ideas together, etc.

2) Short Example: Emphasize choosing the answer that makes sense for the story/text, not just an immediate sentence. (e.g. ***They*** turned and went into the hardware store - makes an acceptable sentence; however, the correct answer is ***he*** because the antecedent is one person and a man, Mr. Walsh.)

One day Mr. Walsh was walking down main street. Suddenly, (him, **he**, they) turned and went into the hardware store.

3) Discuss strategies for choosing right answers:

- work both sides of the gap
- pass over options where you can't decide and keep going
- re-read and self-correct

STUDENT PARTICIPATION:

- Individual Assignment: 9 minute time limit
- Group Work (optional): 10 minutes discussion and comparison of answers; 3 to 4 people per group; perhaps assign a specific paragraph to each group; depending how far the class got with the total assignment

OPTIONS FOR CORRECTING THE ASSIGNMENT:

- Use an OVERHEAD of the assignment and circle the correct options (either ahead of time or as the class works through it - depending on time). Discuss relation type behind errors and meaning loss, as necessary (e.g. on questions where a lot of the students made an incorrect choice).
- Use the ERROR PATTERN ANALYSIS sheet - either with the class or taking home and looking over the assignment to identify patterns in student error to focus on.
- POST THE ANALYSIS - allow students to self-correct and fill out the ERROR PATTERN ANALYSIS sheet; if they have more than 15% errors.
- Refer to handbook for other examples of the relation types used.

EXERCISE 5: ARGUMENTATIVE TEXT

This exercise is based on an argumentative text from a book that deals with socio-political issues: ***World Armament and World Hunger (1986),*** written by Willy Brandt, Chair of the Independent Commission on International Development, and translated by Anthea Bell.

Instructions: There are three options within each frame. Choose one option, only. Be careful to choose the option which fits best with the meaning of the text .

All the People and their Daily Bread

...With our present opportunities (from..for..by)[1] producing food, more people than are (now..then..still)[2] living on the earth could be fed. (Moreover..However..Certainly),[3] the gap between the reproduction of human children (any..or..and)[4] the production of the means to feed (them..then..some)[5] is wider in some regions than (another..others...mine).[6] So the question is, (how..why..who)[7] can agriculture be made profitable? And how (will..are..is)[8] the poor to be able to buy (which..what..when)[9] they desperately need? And (who..how..where)[10] are the export interests of large firms (or..ore..out)[11] of the state to be subordinated (two..to..too)[12] basic domestic consumption? It makes (no..not..on)[13] sense to export foodstuffs from countries (as..where..wear)[14] millions of people (did..do..done)[15] not have enough to eat.

(When..Where..For)[16] global food production declined (slight..slightly..slighted)[17] a few years ago, the authorities responsible (declares..declaring..declared)[18] that the world food situation (and..as..at)[19] a whole was not endangered. That (made..makes..making)[20] the dreadful figures I am (about..above..around)[21] to set out here no better. (In..It..Its)[22] is important to recognize the inconsistency (from..off..of)[23] a state of affairs in (what..witch..which)[24] the international supply situation is (compared..comparatively ..comparative)[25] better than it used to be, (than..while..so)[26] at the same time whole regions are stricken (bye..by..at)[27] famine.

Let us recall (them..a..those)[28] round numbers: (above..over..on)[29] 500 million children and adults suffering (for..into..from)[30] chronic malnutrition, (on..over..above)[31] 800 million living in conditions of 'absolute poverty' -- (such..much..as)[32] was the estimate made by World Bank experts a (fewer..few..for)[33] years ago. Their idea was to obtain points (of..from..for)[34] reference for the large number of people (what..who..whose)[35] are barely able to survive, owing (that..too..to)[36] a combination of undernourishment, disease, illiteracy, high-birthrates, under-employment, and tiny incomes. (It..In..On)[37] 1979, according to the World Bank's estimates, (there..their..they're)[38] were about 800 million people (from..in..for)[39] this category, as already mentioned, most of (the..that..them)[40] in southern Asia and in sub-Saharan Africa. (As..An..And)[41] estimate in 1985 (could..would..wood)[42] not look much better. There (are..our..is)[43] varying forecast figures for the year 2000: (in..into..as)[44] unfavorable circumstances, there (will..would..should)[45] be a further rise from 800 to 1,000 million; (in..into..as)[46] better circumstances, the figure (must..might..will)[47] drop to about 600 million. A large part of humanity is (those..thus..then)[48] affected by 'absolute poverty' in intellectual (and..as..at)[49] well as physical development; (many..much..so)[50] are condemned to perish miserably.

(Now..No..Not),[51] world hunger is not a hysterical flight of fancy. It can (none..not..no)[52] be argued away, (or..nor..no)[53] can it be made to disappear by magic; at best it can be repelled, (within..with..for)[54] much effort. The question is: practically and morally, how long (can..can't..ought)[55] those immediately affected endure it, and (who..how..that)[56] long can the rest of us endure it? ...(Whose..Whether..Weather)[57] 12 or 15 million children are dying of starvation a year, (whose..whether..weather)[58] 500 or 800 million people in the world go hungry, there is an individual fate behind (ever..even..every)[59] set of figures, (how..however..whenever)[60] neatly rounded it may be: the fate of (all..a..such)[61] human being (with..as..had)[62] a right to life, a right not to (been..be..being)[63] harmed, a right to a dignified existence.

ANSWER KEY 5:

1. **FOR** - NONLITERAL-formulaic; Preposition; phrase level

2. **NOW** - TEMPORAL-location-present; Adverb; phrase level

3. **HOWEVER** - LOGICAL-concessive; Conjunction; text level

4. **AND** - LOGICAL-additive; Conjunction; phrase level

5. **THEM** - COREFERENCE-personal; 3rd person plural Objective Pronoun; sentence level (antecedent = children)

6. **OTHERS** - COREFERENCE-impersonal/demonstrative (contrasts with some) sentence level (antecedent = some regions).

7. **HOW** - COREFERENCE-question (MANNER); Question-Proform; clause level

8. **ARE** - TEMPORAL-discontinuous; TENSE-present on Auxiliary verb; sentence level

9. **WHAT** - COREFERENCE-relative/object; Relative pronoun; clause level

10. **HOW** - COREFERENCE-question (MANNER); Question-Proform; clause level

11. **OR** - LOGICAL-disjunctive; Conjunction; phrase level

12. **TO** - NONLITERAL-formulaic; Phrasal verb *to be subordinate to someone or something;* phrase level

13. **NO** - LOGICAL-negation; Particle/Limiting Adjective; phrase level

14. **WHERE** - COREFERENCE-relative (PLACE); Relative pronoun; clause level

15. **DO (not)** - TEMPORAL-location-present; LOGICAL-intensification; Auxiliary verb; sentence level

16. **WHEN** - TEMPORAL-location; Subordinating Adverb; Clause/text level (clause is foregrounded)

17. **SLIGHTLY** - MANNER-basic; Adverb, phrase level

18. **DECLARED - ED** - TEMPORAL-location-past; TENSE/ASPECT marker; sentence level

19. **AS** - MANNER-basic, Conjunction/Preposition; phrase level

20. **MAKES - S** - TEMPORAL-location-present; SIMPLE PRESENT TENSE VERB; sentence/text level

21. **(I am) ABOUT (to do something)** - NONLITERAL-idiomatic; MANNER-inchoative/TEMPORAL-location-future; indicates an action that will begin *immediately*; Particle; sentence level

22. **IT** - COREFERENCE-expletive; 3rd impersonal singular Pronoun; phrase level - gap filler.

23. **OF** - IDENTIFICATIONAL-attributive; Preposition; phrase level

24. **(in) WHICH** - COREFERENCE-relative (STATE); Relative pronoun; clause level

25. **COMPARATIVELY** - MANNER-basic; LOGICAL-comparative; Adverb; phrase level

26. **WHILE** - TEMPORAL-simultaneous; LOGICAL-contrastive; Subordinating Adverb; clause level

27. **BY** - NONLITERAL-idiomatic/THEMATIC-instrument (abstract); Particle with phrasal verb *stricken by;* phrase level

28. **THOSE** - COREFERENCE-demonstrative; Demonstrative-plural-Proform/Limiting Adjective; phrase level

29. **OVER** - LOGICAL-intensification/excessive; means the comparative *more than;* Particle, phrase level

30. **FROM** - THEMATIC-source; LOGICAL-cause: *suffering from (because of) something;* Preposition or Particle with phrasal verb *suffering;* phrase level

31. **OVER** - LOGICAL-intensification/excessive; means the comparative *more than;* Particle, phrase level

32. **SUCH** (THIS) - COREFERENCE-impersonal; MANNER-characteristic (as previously indicated); Indefinite Pronoun - Subject, phrase level (antecedent = 500 million and 800 million)

33. **FEW** - (not fewer) - simple adjective form required following the article 'a', phrase level

34. **OF** - LOGICAL-purpose; IDENTIFICATIONAL-instance-of; (classification by purpose?); Preposition; phrase level

35. **WHO** - COREFERENCE-relative(PERSON); Relative Pronoun; clause level

36. **TO** - THEMATIC-goal; NONLITERAL-idiomatic; *owing to* means *as a result of;* Preposition; phrase level

37. **IN** - TEMPORAL-location; Preposition, text/phrase-level: phrase: *In 1979* is foregrounded.

38. **THERE** - COREFERENCE-expletive; Impersonal Pronoun (PLACE) - gap filler in syntax; phrase level

39. **IN** - LOGICAL-inclusive; Preposition, phrase level

40. **THEM** - COREFERENCE-personal; 3rd person plural Object Pronoun; sentence/phrase level (antecedent = people)

41. **AN** - Reference-indefinite; Indefinite Article; form AN - noun *estimate* begins with a vowel

42. **WOULD** - PSYCHOLOGICAL-attitude-doubt/hypothesis; Subjunctive Mood-Modal auxiliary; sentence level

43. **ARE** - TEMPORAL-location-present (Copula = STATE-existence); text/sentence level

44. **IN** - LOGICAL-inclusive; Preposition, text/phrase level; phrase *in unfavorable circumstances* is foregrounded

45. **WOULD** - PSYCOLOGICAL-attitude- hypothetical (Prediction);Subjunctive Mood-Modal auxiliary; sentence level

46. **IN** - LOGICAL-inclusive; Preposition, text/phrase level, phrase *in better circumstances* is foregrounded

47. **MIGHT** - PSYCHOLOGICAL-attitude-doubt (Prediction); Subjunctive Mood-Modal auxiliary; sentence level

48. **THUS** - MANNER-basic; LOGICAL-consequential; Adverb; sentence level

49. **AS (well as)** - LOGICAL-inclusive; additive; Conjunction; phrase level

50. **MANY** - COREFERENCE - numeric/quantity (PERSONAL); Proform as Subject Nominal; sentence/phrase level (antecedent = a large part of humanity)

51. **NO** - LOGICAL-contradiction; Particle; text/sentence level

52. **NOT** - LOGICAL-negation; Particle, sentence level

53. **NOR** - LOGICAL-negation/disjunctive; Particle; phrase level

54. **WITH** - MANNER-basic; Preposition, phrase level

55. **CAN** - LOGICAL-ability; Indicative Mood- Modal auxiliary; sentence level

56. **HOW** - COREFERENCE-question (QUANTITY-how long); Question proform; clause level

57. **WHETHER** - LOGICAL-disjunctive; Subordinating Adverb; clause level

58. **WHETHER** - LOGICAL-disjunctive; Subordinating Adverb; clause level

59. **EVERY** - COREFERENCE-numeric/quantity; Limiting Adjective; phrase level

60. **HOWEVER** - COREFERENCE-relative;MANNER-indefinite; clause level

61. **A** - Reference-Indefinite; Article; phrase level

62. **WITH** - THEMATIC-possessor; Preposition; phrase level

63. **BE** - FOCUS - Base Form of Copula - Passive Structure required to maintain parallel structure - *"a right (not) to..."*

EXERCISE 6: STRATEGIES FOR TEACHING

RECOMMENDED TIME: Total Time = approximately 45 minutes;
Individual Task = 15 - 20 minutes
In Class Correction = 20 - 30 minutes

EXERCISE TYPE: Rational Cloze

TEXT TYPE: ARGUMENT/PERSUASION

CROSS REFERENCE TO REGULAR COURSE MATERIALS:

THEME: Problem of Pain; Religious/Philosophical Issues

Critical Reading & Writing
for Advanced ESL Students: *Chapter 8 -* ***Persuasion:*** *e.g.* Tolerance & Truth in America
Essays on Death/Dying

Guidelines: *Chapters 19 & 20 - developing an argument/conclusion*

FEATURES OF THE TEXT:

- Clause level connectives (subordinators)
- Mood and Modal auxiliaries: PSYCHOLOGICAL-relations
- Focus on: LOGICAL, COREFERENCE, TEMPORAL, and MANNER relations

LEARNING OBJECTIVES:

Students will gain practise in **producing appropriate textual connectors** and structural patterns that contribute to the style/character of the instructional text type.

Students may learn to identify conceptual patterns behind grammatical errors that they make.

INTRODUCING THE EXERCISE:

The instructions for the rational cloze (rational = focus on connectivity, rather than random word deletions) are fairly straightforward: FILL IN THE BLANKS.

However, emphasis on the fact that the words that are missing are CONNECTIVE WORDS may be appropriate.

STUDENT PARTICIPATION:

- Individual Task: 15 - 20 minutes
- Group Work: 20 minutes; in groups of 2 or 3;
  THIS CAN BE THE MAIN APPROACH TO THE EXERCISE RATHER THAN FOLLOW UP.
- Whole Class Task: 30 - 40 minutes; individuals suggest options; work through it on an overhead with the whole group; then no corrections are required.

OPTIONS FOR CORRECTING THE ASSIGNMENT:

- Use an overhead, and either fill in the options ahead of time or as students suggest answers.
- Post the answers and have students do self-correction or PATTERN ANALYSIS, if errors over 15%.
- Refer to handbook for other examples of the relation types used.

EXERCISE 6: ARGUMENTATIVE TEXT

Divine Omnipotence is a text excerpt is taken from chapter 2 of the book *The Problem of Pain (1940)* which was written by C.S. Lewis at Magdalen College, in Oxford.

Instructions: Connective words join the ideas in a text together. Any grammatical category can be a connective word, so long as its meaning shows a relationship between ideas (e.g. spatial, logical, temporal relations, etc.) or the attitude of the author to the text or the audience. Some of the connectives in this text have been deleted. Fill in the blanks to complete the description.

Divine Omnipotence

"If God were good, He would wish to make His creatures perfectly happy, and if God were almighty, He would be able to do what He wished. But the creatures are not happy.

_____________ (1) God lacks either goodness, _____________ (2) power, or both." This is the problem of pain, _____________ (3) its simplest form. The possibility of answering _____________ (4) depends on showing that the terms "good" and "almighty" and _____________ (5) also the term "happy" are equivocal: _____________ (6) it must be admitted from the outset that _____________ (7) the popular meanings attached to _____________ (8) words are the best, or the only possible meanings, _____________ (9) the argument is unanswerable. ...

Omnipotence means "power to do all, or everything." And we __________ (10) told in Scripture that "with God all things are possible." __________ (11) is common enough, in argument ________ (12) an unbeliever, to be told that God, if He existed and __________ (13) good, would do this or __________ (14); and then, if we pointed _____________ (15) that the proposed action is impossible, __________ (16) be met with the retort, " _____________ (17) I thought God was supposed to be __________ (18) to do anything." This raises the whole question of impossibility.

_______ (19) ordinary usage the word *impossible* generally implies a suppressed clause beginning _________ (20) the word *unless*. ________ (21) it is impossible for me to see the street from _________ (22) I sit writing at this moment; that is, it is impossible to see the street __________ (23) I go up to the top floor where I ___________ (24) be high enough to overlook the intervening building. ________ (25) I had broken my leg I should say "____________ (26) it is impossible to go up to the top floor" ... *unless* some friends turn up _________ (27) will carry me. Now let us advance to a different plane of impossibility, ____________ (28) saying, "It is, at any rate, impossible to see the street __________ (29) *long as* I remain where I am ________ (30) the intervening building remains where it is. __________ (31) might add "unless the nature of space, or of vision __________ (32) different from what it is." .... I should have to reply " I don't know __________ (33) space and vision *could* _________ (34) have been of such a nature as you suggest." __________ (35) it is clear that the words *could* ________ (36) here refer to some absolute kind of possibility or impossibility _________ (37) is different from the relative possibilities and impossibilities we __________ (38) been considering. I cannot say __________ (39) seeing round corners is, in __________ (40) new sense, possible or not, ____________ (41) I do not know whether it is self-contradictory or _________ (42). But I know very well that if it _________ (43) self-contradictory it is absolutely impossible. The absolutely impossible _________ (44) also be called the intrinsic-ally impossible because it carries the impossibility within _________ (45), instead of borrowing it from ________ (46) impossibilities which in their turn depend __________ (47) others. It has no *unless* clause attached to it. It is impossible _________ (48) all conditions and in all worlds and for all agents.

"All agents" here includes God Himself. __________ (49) Omnipotence means power to do all ____________ (50) is intrinsically possible, not to do the intrinsically impossible. You _____________ (51) attribute miracles to Him, but not nonsense. ...____________ (52) you choose to say "God can give a creature free will ____________ (53) at the same time withhold free will from it," you have ______________ (54) succeeded in saying *anything* about God. ... It is no more possible for God ______________ (55) for the weakest of His creatures to carry out both of two mutually exclusive alternatives; not because His power meets an obstacle, but because nonsense remains nonsense even when we talk about God.

ANSWER KEY 6: Answers based on the author's original text. Other alternatives are possible. Be prepared to discuss alternatives with the students.

1. **THEREFORE** - LOGICAL-conclusive; Conjunction; text level

2. **OR** - LOGICAL-disjunctive; partner in Co-relative Conjunction *either...or;* phrase level

3. **IN** - LOGICAL-inclusive;NONLITERAL-formulaic; Preposition, phrase level

4. **IT** - COREFERENCE-impersonal; 3rd impersonal singular Subject Pronominal; text/phrase level (antecedent = problem)

5. **PERHAPS** - LOGICAL-probability; Adverb; phrase level

6. **FOR** - LOGICAL-reason/concessive; Conjunction; text/sentence level

7. **IF** - LOGICAL-conditional; Subordinating conjunction; clause level

8. **THESE** - COREFERENCE-demonstrative; Demonstrative plural Proform/Limiting Adjective; phrase level

9. **THEN** - LOGICAL-consequential; Subordinating Adverb; clause level

10. **ARE** - TEMPORAL-discontinuous; Auxiliary Verb - Present Tense; sentence level

11. **IT** - COREFERENCE-expletive; 3rd impersonal pronoun - Subject Nominal; phrase level

12. **WITH** - THEMATIC-associative; Preposition with Nominalized phrasal verb: *argument with ...* phrase level

13. **WERE** - PSYCHOLOGICAL-attitude-doubt; Subjunctive Mood; Modal form of Copula; sentence level

14. **THAT** - COREFERENCE-demonstrative; Proform as Object-nominal; phrase level

15. **OUT** - NONLITERAL-idiomatic; *to point out* means *to bring something to someone's attention*; Particle; phrase level

16. **TO** - INFINITIVE-marker; introduces infinitive clause - LOGICAL-consequence, associated with the infinitive clause.

17. **BUT** - LOGICAL-contradictive; Conjunction; clause level

18. **ABLE** - LOGICAL-possibility; Adjective; phrase level

19. **IN** - LOGICAL-inclusive; Preposition, text/phrase level; phrase *in ordinary usage* is foregrounded.

20. **WITH** - MANNER-basic; Preposition; phrase level

21. **THUS** (alternate CONSEQUENTLY); Conjunction, text level

22. **WHERE** - COREFERENCE-relative (PLACE); Relative pronoun; clause level

23. **UNLESS** - LOGICAL-conditional/negative; Subordinating conjunction; clause level

24. **SHOULD** - LOGICAL-probability; Subjunctive mood; Modal auxiliary; sentence level

25. **IF** - LOGICAL-conditional; Subordinating conjunction; clause level

26. **BUT** - LOGICAL-contradictive; Conjunction; sentence level

27. **WHO** - COREFERENCE-relative (PERSON); Relative pronoun; clause level

28. **BY** - LOGICAL-means; Preposition, phrase level

29. **AS (long as)** - TEMPORAL-duration; LOGICAL-conditional; Conjunction; clause level

30. **AND** - LOGICAL-additive; Conjunction; sentence level

31. **SOMEONE** (alternate YOU; SOMEBODY, ANOTHER, OTHERS) - COREFERENCE-indefinite/personal; Proform as Subject Nominal; phrase level

32. **WERE** - PSYCHOLOGICAL-attitude/LOGICAL-possibility; CONJECTURE; Subjunctive Mood; Modal form of Copula; sentence level

33. **WHETHER** - (alternate IF) - LOGICAL-disjunctive/probability;COREFERENCE-indirect-question; Subordinating Conjunction; clause level

34. **POSSIBLY** - LOGICAL-possibility;intensification; Adverb - intensifies MODAL-could, sentence level

35. **NOW** - LOGICAL-shift/intensification; Adverbial, text-level

36. **POSSIBLY** - LOGICAL-possibility;intensification; Adverb - intensifies MODAL-could, sentence level

37. **WHICH** (alternate THAT) - COREFERENCE-relative; Relative pronoun; clause level

38. **HAVE** - TEMPORAL-location-present; *have been considering;* Auxiliary verb; sentence level

39. **WHETHER** - (alternate IF) - LOGICAL-disjunctive/probability; COREFERENCE-indirect-question; Subordinating Conjunction; clause level

40. **THIS** - COREFERENCE-demonstrative; Proform/Limiting Adjective; phrase/text level (antecedent for THIS = *some absolute kind of possibility*).

41. **BECAUSE** - LOGICAL-reason; Subordinating adverb; clause level

42. **NOT** - LOGICAL-negation; Particle; clause level (*whether ...or not)*

43. **IS** - IDENTIFICATIONAL-attributive;TEMPORAL-location-present; 3rd singular Copula in Present Tense; sentence/text level (The majority of the text is conveyed in the present tense or subjunctive mood)

44. **MAY** - LOGICAL-permissive; Indicative Mood- Modal Auxiliary; sentence level

45. **ITSELF** - COREFERENCE-reflexive; impersonal reflexive proform - Object Nominal; phrase/sentence level (antecedent = the intrinsically/ absolutely impossible)

46. **OTHER** - COREFERENCE-indefinite/demonstrative; Proform/Limiting Adjective; text/phrase level (The other impossibilities - are the types of natural limitations that Lewis has discussed earlier in the text).

47. **UPON** - NONLITERAL-formulaic - Particle in phrasal verb *depend upon,* phrase level

48. **UNDER** - NONLITERAL-formulaic - *under (the, these, all) condition(s),* phrase level

49. HIS - COREFERENCE-possessive-personal; 3rd person singular, possessive proform/Limiting Adjective; phrase/text level; (antecedent = God Himself).

50. THAT (alternate WHICH) -- COREFERENCE-relative (OBJECT); Structural Subordinator; clause level

51. MAY - LOGICAL-permissive; Indicative Mood -Modal auxiliary; sentence level

52. IF - LOGICAL-conditional; Subordinating conjunction; clause level

53. AND - LOGICAL-additive; Conjunction; phrase level

54. NOT - LOGICAL-negation; Particle; sentence level

55. THAN - LOGICAL-comparative; disjunctive; Conjunction; phrase level

EXERCISE 7: STRATEGIES FOR TEACHING

RECOMMENDED TIME: In Class Start: 10 - 15 minutes group work
Homework: 30 - 45 minutes
In Class Discussion: 30 - 40 minutes

EXERCISE TYPE: Revision Task

TEXT TYPE: BIOGRAPHY (NARRATIVE)

CROSS REFERENCE TO REGULAR COURSE MATERIALS:

THEME: Inventions; Personal History/Biography

Critical Reading & Writing
for Advanced ESL Students: *Chapters 5 & 8 - Instruction on Revision (pg 57-58;117).*

Guidelines: *Chapter 3 - Narrative Essay (pg 74,75); Chapter 10 - Revision*

FEATURES OF THE TEXT:

- Provides practise in sentence-combining within paragraph structures
- Emphasis on subordinating using TEMPORAL, COREFERENCE and LOGICAL relations
- Eliminating repetitious material by using TEMPORAL and SPATIAL prepositional phrases as ADJUNCTS (phrases not required by the verb - additional, elaborative).
- Use of foregrounding of phrases to place connectors at the beginning of a complex sentence
- Choosing transitional devices at the beginning of paragraphs

LEARNING OBJECTIVES:

The student will gain **practise in revising text** by **recognizing relationships between simple sentences** that have not been made explicit and **recombining material and inserting connectives** to make the text more compact.

INTRODUCING THE EXERCISE:

It is a good idea to introduce this exercise with the students in small groups, working together to suggest revisions. The students can then revise the text individually at home.

STUDENT PARTICIPATION:

- Small Group: 10 - 15 minutes for task introduction
- Individual Homework: 30 - 45 minutes
- Class Discussion - 30 - 40 minutes - compare students revisions; compare to sample answer key

OPTIONS FOR CORRECTING THE ASSIGNMENT:

- Collect the students revisions and choose 2 or 3 to put on overheads to present to the class to discuss for grammatical features and types of relations inserted when revising.
- Hand out a copy of the sample revision text; compare student work to author original - discuss the structural changes and types of relational connectives inserted.
- Post the analysis of the sample text for student interest ??
- Refer to handbook for relations that are posing difficulty.

EXERCISE 7: BIOGRAPHICAL TEXT

This biographical information about Leo Hendrik Baekeland presented here was obtained from Nathan Aaseng's *Twentieth Century Inventors* (1991). Baekeland was a famous chemist who invented Velox photography paper (bought by the Eastman-Kodak company) and the first major form of plastic, *Bakelite*.

REVISION EXERCISE:

Instructions: Read the paragraphs below. Revise them by joining sentences that can be combined using the spatial, temporal, logical, and coreference relation types. You may add transitional phrases, that link the paragraphs, as well.

Example: For most of existence, nature has been the sole supplier of raw materials. We use raw materials to construct items that we need and enjoy.

Revision: For most of ***human*** existence, nature has been the sole supplier of raw materials ***for the construction of items*** we need and enjoy.

Leo Hendrik Baekeland was born in Ghent, Belgium. He was born November 14, 1863. Baekeland found a career in chemistry. His life took paths not paved by family traditions or influences. His father worked as a shoe repairman. His mother worked as a maid. His father and his mother could not read or write.

Leo was a certain kind of boy. He would not let others direct his interests. He took a hobby. He took it with gusto. It became the cornerstone of his life. Young Leo had a dream. For many years, he wanted to run away to sea. He prepared for this adventure. He mastered the subject of geography. He spent only enough effort in his other subjects to get by.

He found a hobby even more exciting than the sea. It led him into his chosen career. The new hobby was photography. Baekeland sacrificed his schoolwork. He sacrificed it for the sake of his passion, photography. He was supposed to be studying in his room on many nights. He secretly pulled out his equipment instead. He had taken photographs during the day. He developed them at night.

But he quickly made a discovery. There is a way to accomplish much in the field of photography. He needed to learn about chemicals. There are some chemicals involved in the photography development process. His school did not teach some subjects, like the ones to do with photography. Young Baekeland had to turn to night school. The night school was the Municipal Technical School of Ghent. There he satisfied his curiosity. Baekeland put his mind to one of his pet subjects. The result was astounding. His teachers, the ones at the Municipal Technical School, were amazed. He caught on to the concepts of chemistry quickly.

ANSWER KEY 7: This is the original text segment as it was presented in *Twentieth Century Inventors*. It is not the only possible way that the previous *rough copy* could have been revised. It serves as a guideline and comparison for the students' revisions.

Leo Hendrik Baekeland was born in Ghent, Belgium, **on**[1] November 14, 1863. The paths **that**[2] Baekeland **took in finding**[3] a career in chemistry were not paved by any family traditions or influences. **Neither**[4a] his father, **who**[5] worked as a shoe repairman, **nor**[4b] his mother, **who**[6] worked as a maid, could read or write.

In any event,[7] Leo was **not the kind of boy to let others**[8] direct his interests. **When**[9] he took a hobby, he **did so**[10] with **such**[11a] gusto, **that**[11b] the hobby became the cornerstone of his life. **For many years,**[12] young **Leo's dream**[13] **was to**[14] run away to sea. **In preparation**[15] for this adventure, he **quickly**[16] mastered the subject of geography, **while**[17] **spending**[18] only enough effort in his other subjects to get by.

Eventually,[19] he found a hobby even more exciting than the sea, **and that was what**[20] led him into his chosen career.The new hobby was photography. **Again,**[21] Baekeland sacrificed schoolwork **for**[22] the sake of his passion. **On many nights**[23] **when**[24] he was supposed to be studying in his room, he secretly pulled out his equipment **to develop**[25] photographs he had taken during the day.

But he quickly **discovered that**[26] **in order to**[27] accomplish much in the field of photography, he needed to learn about the chemicals **involved in the process.**[28] **Because**[29] his school did not teach **any**[30a] subjects **that**[30b] **had to do with**[31] photography, young Baekeland had to turn to night school **at**[32] the Municipal Technical School of Ghent **to satisfy**[33] his curiosity. **When**[34] Baekeland put his mind to one of his pet subjects, the result **could be**[35] astounding. His teachers **at**[36] the Municipal Technical School were amazed **at**[37] **how quickly**[38] he caught on to the concepts of chemisty.

ANALYSIS OF ANSWER KEY 7:

PARAGRAPH ONE: 7 sentences combined into 3 sentences:

1. The date of his birth can be included in the first sentence by using the preposition ***on*** to signal TEMPORAL-location, creating the adjunct (optional - not required by the verb) phrase *on November 14, 1683.*

2 & 3. The sentence *Baekeland found a career in chemistry* is subordinated to the notion of him taking a path: *The paths* ***that*** *Baekeland* *took. (His life* is deleted). The verb *found* is changed to the participle: ***in finding*** *a career in chemistry...*

4 to 6. Neither...nor: The LOGICAL-disjunctive/negative pair of correlative conjunctions with **who** the COREFERENCE-relative allows the three sentences to be combined into one complex clause, where the phrases *his father* and *his mother* are only stated once.

PARAGRAPH TWO: 10 sentences combined into 4 sentences:

7. TRANSITION - ***In any event*** indicates a LOGICAL-shift of subject.

8. The first two sentences of the second paragraph are combined by shifting the LOGICAL-negation so that *a certain kind* becomes ***not the kind of boy,*** in scope, the negative still includes *to let others direct his interests.*

9. The third and fourth sentences (in paragraph 2) can be combined by using **When** - Temporal-location; Subordinating adverb.

10. ***did so*** - replaces or prevents the repetition of the verb *took,* when the third and fourth sentences, in paragraph 2 are combined.

11. The fourth and fifth sentences in the paragraph can also be combined by using the LOGICAL-consequential connector ***such...that;*** the way that Leo approached his hobby *resulted* in it becoming the cornerstone of his life; so the three sentences can all be combined into one more sophisticated form.

12. ***For many years*** is a good transitional phrase, there is no need to change it.

13. The sentence *Young Leo had a dream* can be combined with the main clause *he wanted to run away to sea,* by nominalizing it (using the THEMATIC-possessor relation - morphology: 's) to ***young Leo's dream*** and substituting it for *he* .

14. ***was to*** ... is substituted for *wanted* to make the sentence flow properly, because the concept of *dream* includes the notion of *wanting.*

15. *He prepared* is changed to ***In preparation*** ...so that the entire clause can be subordinated to the next sentence: *He mastered the subject of geography.* The prepositional phrase *In preparation for this adventure* is actually linked to the main clause by the relation LOGICAL-purpose (i.e. in order to prepare).

16. ***quickly*** - the additional information of MANNER; is consistent with its inclusion in the later paragraph and brings across the unusual talent of the young man.

17 & 18. ***while spending*** - the third sentence can again be linked into the more complex expression, by using a LOGICAL-contrastive preposition and changing the verb to a participle (nominal form).

PARAGRAPH THREE: 9 sentences combined into 4 sentences.

19. ***Eventually*** - This is a transition marker; indefinite, TEMPORAL-durative relation. Including this transition marker indicates to the reader that some time passed in Baekeland's life before he found the new hobby.

20. ***and that was what*** - the LOGICAL-additive *and* plus the emphatic COREFERENCE-relative link *that was what* - are used to link the first two sentences in the third paragraph.

21. ***Again*** - the MANNER-repetitive adverb, when foregrounded serves as a textual link; it also has the LOGICAL-emphatic relation. The concept that Baekeland prioritized his efforts according to his interests is indication of his strong self-will and personal sense of direction.

22. The words *He sacrificed it* are repetitious and can be deleted.The preposition ***for***; which indicates LOGICAL-purpose, is sufficient to link the remainder of the fifth sentence to the fourth. The word *photography* -- after the word *passion* may also be deleted. The reader should be able to understand from context that the new hobby, photography is equivalent to his passion.

23. The phrase ***On many nights*** is foregrounded, placing a connective at the beginning of the new complex sentence that is formed.

24. The main clause *He was supposed to be studying in his room* is changed to a subordinate clause by adding the TEMPORAL-location link, Subordinating adverb ***when.***

25. The last two sentences of the paragraph are combined with each other to make an infinitive clause ***to develop photographs he had taken during the day*** and subordinated to the main clause *He secretly pulled out his equipment* (the LOGICAL-contradictive - instead is replaced by the notion of LOGICAL-purpose associated with the infinitive clause).

PARAGRAPH FOUR: 12 sentences combined into 4 sentences.

26. The verb phrase *made a discovery* is restructured to ***discovered that*** to allow for the next sentences to be combined together. The word ***that*** signals that a LOGICAL-elaboration is to follow. The next two sentences are that elaboration.

27. The relationship between the second and third sentences of the paragraph is LOGICAL-purpose: ***in order to.***

28. The third sentence is predominantly repetitive; it can be reduced to the participial phrase: ***involved in the process,*** and be subsumed in the previous sentence.

29. The relationship between the fifth and sixth sentences is LOGICAL-cause/reason, so the fifth sentence can be begun with ***because.***

30 & 31. The expression *some subjects, like the ones to do with photography* is awkward in writing. The tone is too conversational. The suggested changes are: ***any*** *subjects that* ***had to do with photography*** - *some* to *any; like the ones* to *that had.*

32. The beginning words of the seventh sentence are deleted and *the Municipal Technical School of Gent* is joined to the previous sentence as a prepositional adjunct - SPATIAL-location - with the preposition ***at***.

33. The subject of the eighth sentence is deleted and the verb changed to the infinitive form ***to satisfy*** which signals a LOGICAL-purpose link to the previous complex sentence.

34. The ninth and tenth sentences are combined using the TEMPORAL-location, subordinating adverb ***when***. The verb *was* is changed to ***could be*** (LOGICAL-possibility) to be more emphatic.

36. The appositional phrase *the ones at the Municipal Technical School* is reduced to a simple SPATIAL-location, prepositional phrase beginning with ***at***.

37. The last sentence is the LOGICAL-elaboration of what the teachers were amazed ***at;*** by inserting the preposition, the final sentence can be restructured as a subordinate clause.

38. ***how quickly*** - since it is the MANNER of his learning that stimulated the amazement; this can be brought into focus by using ***how*** as the relative proform (connective) and foregrounding the adverb of manner.

EXERCISE 8: STRATEGIES FOR TEACHING

RECOMMENDED TIME: Total Time: 40 - 50 minutes
Individual Task: 15 - 20 minutes
In Class Discussion: 25 - 30 minutes

EXERCISE TYPE: Editing Task

TEXT TYPE: EXPOSITORY (EXPLANATION & DEFINITION) - Research Paper

CROSS REFERENCE TO REGULAR COURSE MATERIALS:

THEME: Learning (language); Learning/Cognitive Style

Critical Reading & Writing for Advanced ESL Students: *Chapters 6 - Explanation; Chapter 7 - Definition; Chapter 10 - Revision.*

Guidelines: *Chapter 3 - Narrative Essay (pg 74,75); Chapter 10 - Revision*

FEATURES OF THE TEXT:

- Emphasis on agreement features: articles, proforms, verbs
- Emphasis on correct structure of passives, tense of auxiliary verbs, use of participles and infinitives
- Some corrections to adjective endings
- Correct form for subordination: COREFERENCE relations
- Correct preposition usage
- A few spelling corrections

LEARNING OBJECTIVES:

The student will gain **practise in editing text** by **recognizing errors and correcting them** in a paragraph. This will involve changes in word structure, deletions, additions, etc.

INTRODUCING THE EXERCISE:

It is a good idea to go over the example in the instructional section of the handout with the students before letting them start the assignment. Let them try the example and correct it with you. (5 minutes max.)

STUDENT PARTICIPATION:

- Individual Homework: 15 - 20 minutes
- Class Discussion - 25 - 30 minutes - compare students revisions; compare to sample answer key

OPTIONS FOR CORRECTING THE ASSIGNMENT:

- Put the uncorrected text on an overhead; to present to the class to discuss for grammatical features and types of changes made when editing.
- Hand out a copy of the sample edited text; compare student work to author original - discuss the structural changes and types of relational connectives inserted.
- Post the analysis of the sample text for student interest ??

EXERCISE 8: EXPOSITORY TEXT

This text excerpt has been altered from a research report by J. Michael O'Malley and Anna U. Chamot: *Learner Characteristics in Second-Language Acquisition* (1993).

EDITING EXERCISE:

Instructions: Locate errors in the text and then edit them, by deleting or adding endings, by writing a correct form above an error, or by inserting or deleting words, as necessary.

Example: These component of Carroll's model for foreign language aptitude is intend too measure rote learning ability at contrasted to meaningful learning of connect text.

Learning Style

Learning style can be define general as the way how an individual prefers to learn or processing information. More especially, Lawrence (1984) indicate that term *learning style* had be used by for ways: (1) cognitive style, preferred or habit patterns of mental functioned or information processing; (2) attitudes or interests these influence attention into learning; (3) the tendency too seek learn environments that are consistent as one's cognitive style, attitudes, and interests; and (4) an tendency to using certain learning tools (learning strategies) while to avoid others. Oxford (1990) agrees that cognitive style is a subcategory to and shall be differentiated for learning styles, being this concepts tends to overlap the literature. She citing one review (Shipman and Shipman 1985) that use nineteen variable for represent learning style and adds to this a additional six variables from another studies. Something of this variables are impulsivity-reflectivity, field dependence/independence, and extraversion-intraversion. Oxford go onto discussing seventeen variables underneath the rubric of cognitive style, about a third which overlap the examples she notes illustrating learning style. These variables are a mix combination for presumable fixed attributes of learners and learned character could been modifiable to instruction.

This of ed
Example: ~~These~~ component of Carroll's model ~~for~~ foreign language aptitude is intend^ to~~o~~
as with ed
measure rote learning ability ~~at~~ contrasted ~~to~~ meaningful learning of connect^ text.

EDITING ANSWER KEY 8: Based on the authors' original text.

Learning Style

d ly in which
Learning style can be define^ general^ as the way^ ~~how~~ an individual prefers to learn
specifically s the
or process~~ing~~ information. More ~~especially~~, Lawrence (1984) indicate^ that ^term
has been in four ual
learning style ~~had be~~ used ~~by for~~ ways: (1) cognitive style, preferred or habit^
ing that/which
patterns of mental function~~ed~~ or information processing; (2) attitudes or interests ~~these~~
ing
influence attention int~~o~~ learning; (3) the tendency to~~o~~ seek learn^ environments that are
with
consistent ~~as~~ one's cognitive style, attitudes, and interests; and (4) a~~n~~ tendency to
e ing
us~~ing~~ certain learning tools (learning strategies) while ~~to~~ avoid^ others. Oxford (1990)
of should from
agrees that cognitive style is a subcategory ~~to~~ and ~~shall~~ be differentiated ~~for~~ learning
although these in es
styles, ~~being this~~ concepts tend~~s~~ to overlap ^ the literature. She cit~~ing~~ one review
s s to
(Shipman and Shipman 1985) that use^ nineteen variable^ ~~for~~ represent learning style
n these
and adds to this a^ additional six variables from ~~an~~other studies. Some~~thing~~ of ~~this~~
variables are impulsivity-reflectivity, field dependence/independence, and extraversion
es
-intraversion. Oxford go^ on / to discuss~~ing~~ seventeen variables under~~neath~~
of with
the rubric of cognitive style, about a third ^ which overlap ^ the examples she notes
ed y
illustrating learning style. These variables are a mix^ combination for presumabl~~e~~ fixed
istics that in
attributes of learners and learned character^ ^ could be~~en~~ modifiable ~~to~~ instruction.

RELATIONAL ANALYSIS OF THE EDITING CORRECTIONS:

Line 1:

1. define - should be: defined - MANNER-completive
2. general - should be: generally - ly suffix - MANNER-basic
3. the way how - should be: the way **in which** - MANNER-basic - based on expression: to learn (how?) ***in*** a certain ***way***...; and COREFERENCE-relative-impersonal

Line 2:

1. processing - should be: process; the conjunction ***or*** must join parallel structures - both *learn* and *process* need to be in the base form that companies the infinitive marker ***to.***
2. especially - should be: ***specifically;*** both words could convey the link LOGICAL-specification; the word *more* can not co-occur with *especially;* and ***specifically*** would be more stylistically appropriate in a research text.
3. indicate - should be: **indicates**; the base form needs the 3rd singular agreement marker to supply TEMPORAL-location in the present tense.
4. that term - should be: that ***the*** term; this is reference to a specific term, so the definite article is required to indicate that the reference is specific.

Line 3:

1. had be used- should be: ***has been*** used- Passive form - TEMPORAL-past; MANNER-completive (perfective)
2. by - should be: ***in*** ... ways; MANNER-basic
3. for - should be: ***four*** ; spelling error - COREFERENCE-numeric/quantifier; Specifier or Adjective
4. habit - should be: ***habitual*** - ual suffix; required for adjective form and IDENTIFICATIONAL-attributive position

Line 4:

1. functioned - should be: ***functioning*** - ing suffix; MANNER-progressive - functions as a gerund/noun in English; Past participle (Manner-completive) can not act as a gerund/noun
2. these - should be: ***that*** *(or which);* COREFERENCE-relative - not demonstrative

Line 5:

1. into - should be: ***in*** learning; into - requires a Thematic-goal and implicit Spatial-path; 'in learning' - 'in (the process of) learning' - TEMPORAL-duration - could also be WHILE; WHEN learning.
2. too - should be be: ***to*** - formulaic expression: *the tendency to do something*; infinitive phrase indicates - LOGICAL-elaboration - the content of the tendency.
3. learn - should be - ***learning*** *environments;* ing - suffix; MANNER-progressive; Progressive-Aspect-Participle allowed to function as an adjective; IDENTIFICATIONAL-attributive position; a base form - not allowed to function as an adjective.

Line 6:

1. consistent as - should be: *consistent* ***with;***. **phrasal verb** (THEMATIC-associative meaning is somewhat relevant); *as* would convey the idea of LOGICAL-comparison ??
2. an - should be: ***a*** ; an is only used before nouns beginning with a vowel; *the* - the tendency - in a generic sense is also possible here.

Line 7:

1. using - should be ***use;*** the base form of the verb is required following the infinitive marker; formulaic e expression: *the tendency to do something;* requires the infinitive
2. to avoid - should be: ***avoiding;*** following the preposition *while* - a noun is required - therefore the verb must be in the MANNER-progressive (continuative) - Progressive-participle form - the gerund/noun form.

Line 8:

1. subcategory to - should be: ***subcategory of*** - fixed expression (emphatic) of INDENTIFICATIONAL-instance-of - relationship.
2. shall - should be: ***should; shall*** has very restricted usage indicating a command or a request that expects a positive answer; *should* - PSYCHOLOGICAL-disclaimer - recommendation; less explicit than a command, therefore more polite and appropriate for the style of a research article.
3. differentiated for - should be: ***differentiated from;*** **phrasal verb**; *from* gives the sense of THEMATIC-associative; LOGICAL-negative; (*for* - would give the sense of a beneficiary or purpose - in the context, the term is being defined, therefore separated from learning styles).

Line 9:

1. being - should be ***although*** - LOGICAL-concessive
2. this - should be: ***these;*** specifier (COREFERENCE-demonstrative- limiting adjective) **number agreement** with the plural noun - *concepts*
3. tends - should be: ***tend;*** verb **number agreement** with the noun *concepts.*
4. overlap the literature - should be: ***overlap in the literature;*** *in* - indicates SPATIAL-location - where the overlap occurs - not to make the literature overlap.
5. citing - should be: ***cites;*** references to ideas from the literature are usually presented in the present tense - unless the work is extremely dated; then the past or present are possible, particularly if a researcher or author has changed a viewpoint since that article.

Line 10:

1. use - should be: ***uses;*** main verb must be marked for **number agreement** with the noun *review;*
2. variable - should be: ***variables;*** the noun must **agree in number** with the numeric specifier - nineteen.
3. for - should be: ***to;*** NONLITERAL-formulaic expression *to use something to represent something else*

Line 11:

1. a - should be: ***an; indefinite article,*** as the adjective begins with a vowel: *additional* (the adjective lumps the 6 variables into one group so the article is required)
2. another - should be:***other;*** the noun that follows is plural; **number agreement**
3. something - should be: ***some;*** needs to be COREFERENCE-numeric/quantifier - to specify part of the variables; something is an indefinite/inanimate object concept.
4. this - should be: ***these;*** **number agreement** with the noun: *variables*

Line 13:

1. go - should be: ***goes;*** **number agreement** with noun Oxford; also no indication of the appropriate tense if the verb is left in the base form (TEMPORAL- location-present).
2. onto discussing- should be: ***on to discuss; to discuss*** is the infinitive form; *onto* - as a compound preposition would indicate SPATIAL-path-directional; THEMATIC-goal; this is NONLITERAL-formulaic: ***to go on to do something,*** which requires the infinitive form of *to.*
3. underneath - should be: ***under;*** NONLITERAL-formulaic; ***under the rubric (category)*** - to classify within a group; ***underneath*** indicates a spatial location involving an concrete object...could not apply in a discussion.

Line 14:

1. a third which - should be: ***a third of which;*** a third here indicates *a fraction/part of the variables*; **not**, *a third* - as an ordinal number referring to an object in an ordered series.
2. overlap the examples - should be: ***overlap with;*** **phrasal verb**; THEMATIC-associative; what object(s) participates in the act of overlapping.

Line 15:

1. mix - should be: ***mixed;*** the past participle when it indicates a RESULTATIVE STATE - may act as a property and be placed in IDENTIFICATIONAL-attributive place before a noun; the base form of the verb *mix* can not function as an adjective (It can be a noun e.g. party mix.)

2. combination for - should be: *combination **of**;* this is a nominalization structure - the preposition *of* indicate the THEMATIC-patient link to ...*attribute* (what is combined). Note: we do say: *What is the **combination for** this lock.* In that case the *for* indicates THEMATIC-possession - *belonging to.*
3. presumable - should be: ***presumably;*** The structure requires an adverb to specify the resultative-adjective form *fixed;* PSYCHOLOGICAL-disclaimer.

Line 16:

1. character - should be: ***characteristics;*** *istics - suffix* - means individual attributes; EMPHATIC expression of the notion of *attributive relations (general);* the term, *character,* is a collective concept - the holistic nature - personality of a person, the integrity of a person.
2. character could been modifiable - should be: *character **that** could **be** modifiable.* Needs a COREFERENCE-relative link (which/that); **infinitive form of the copula** follows the modal auxiliary...indicates passive structure.
3. modifiable to instruction - should be: ***in*** *instruction;* TEMPORAL-duration; (*during instruction* - also possible; *when instructing a student* - also possible).

EXERCISE 9: STRATEGIES FOR TEACHING

RECOMMENDED TIME: Total Time = approximately 30 minutes
Group Work = 20 minutes
In Class Correction = 10 minutes

EXERCISE TYPE: Collocations (Verb, Noun or Adjective + Particle/Preposition)

TEXT TYPE: EXPOSITORY (EXPLANATION & DEFINITION) - Research Paper

CROSS REFERENCE TO REGULAR COURSE MATERIALS:

THEME: Learning (language); Learning/Cognitive Style

Critical Reading & Writing
for Advanced ESL Students: *Chapters 6 - Explanation; Chapter 7 - Definition;*
Chapter 9: Learning to do Research

Guidelines: *Chapter 10: Essays*

FEATURES OF THE TEXT:

This text section had a number of expressions where the preposition or particle must memorized in relation to a verb, noun or adjective and a variety of nominal expressions that use the preposition *of*. It is a typical applied linguistics research report in style. There is no analysis of specific relational categories because the prepositions in *collocations* (that co-occur with another category) do not hold the standard relational meanings, the expression is FORMULAIC; it must be learned as one unit.

LEARNING OBJECTIVES:

Students will learn the importance of **distinguishing the use of prepositions in adjunct prepositional phrases (additive, not required by the verb) and *collocations*,** by choosing these types of expressions from options to create a unified text.

COLLOCATION: a noticeable arrangement or conjoining of linguistic elements (Websters, 1983)

INTRODUCING THE EXERCISE:

Read through the instructions and the example with the students. Explain what a collocation is. Perhaps take time to read through the *expressional options* at the end of the exercise.

STUDENT PARTICIPATION:

- Group Work: 20 minutes, groups of 2 or 3 students recommended

OPTIONS FOR CORRECTING THE ASSIGNMENT:

- Use an overhead of the actual exercise and have the students suggest their answers.
- Use an overhead of the answer key.
- Xerox copies of the answer key can be handed out.

EXERCISE 9: EXPOSITORY TEXT

This text excerpt has been altered from a research report by J. Michael O'Malley and Anna U. Chamot: *Learner Characteristics in Second-Language Acquisition* (1993).

EXERCISE IN COLLOCATIONS & FORMULAIC EXPRESSIONS:

Instructions: For each set of blanks marked by the same number choose an expressional option from the sets provided [marked: a) to o)] to complete the meaning of the paragraph. You may have to alter the form of the expression to make it fit the paragraph and, in some cases, you may need to use more than one option from a set within the paragraph. The sets of options are in a random order not aligned with the gaps in the text.

Example: The results of the experiment lead to erroneous __________ (1) __________ (1) the product.
(conclusions about something; in conclusion)

The first __________ (1) __________ (1) continuing the analysis of cognitive style is to __________ (2) students __________ (2) more information that will enable them to gain __________ (3) __________ (3) their own learning (Ehrman 1990). Ehrman notes that students analyze their own cognitive styles in order to increase their efficiency in studying and __________ (4) __________ (4) classmates. __________ (5) a cognitive-theoretical __________ (5), this type of __________ (6) __________ (6) self-regulation should be __________ (7) __________ (7) enabling students to understand language -learning tasks __________ (8) __________ (8) __________ (8) their own style preferences. A second reason that __________ (9) __________ (9) learning or cognitive styles might be advantageous is that individuals may have different learning strategy preferences __________ (10) __________ (10) their style (Ehrman 1990; Galloway and Labarca 1990; Gardner 1990; Oxford 1990). That is, students who exhibit a style such as field independence are probably __________ (11) different strategies __________ (11) identifying and selecting information in learning tasks than students who __________ (12) __________ (12) be field dependent. Learners who are __________ (13)

_____________ (13) their personal styles for learning may be able to _______________ (14)

________________ (14) their repertoire of learning strategies the ones that are most personally

_____________ (15) ____________(15) particular learning tasks.

Expressional Options:

a) depending on; to be dependent upon

b) to reason with; the reason for something

c)to use a strategy for something; to be strategically placed

d) to provide for someone; to provide someone with something

e) to work for someone; to work with someone

f) to be familiar with; familiarity with; to be too familiar with

g) to get control over something or someone; to be controlled by something

h) from a (certain) standpoint; to standout from the crowd

i) something suits someone; something is suitable for (a setting or a purpose)

j) to be an informant for someone; information on something

k) to select from a set of things; to select someone for a position

l) to reorient oneself; to orient toward something

m) to tend to (toward) something; a tendency for something (or.. to do something)

n) to be used by someone; to use something for (something or a purpose)

o) in terms of; to come to terms with

ANSWER KEY 9:

The first ***reason*** (1) ***for*** (1) continuing the analysis of cognitive style is to ***provide*** (2) students ***with*** (2) more information that will enable them to gain ***control*** (3) ***over*** (3) their own learning (Ehrman 1990). Ehrman notes that students analyze their own cognitive styles in order to increase their efficiency in studying and ***working*** (4) ***with*** (4) classmates. ***From*** (5) a cognitive -theoretical ***standpoint*** (5), this type of ***information*** (6) ***on*** (6) self-regulation should be ***oriented*** (7) ***toward*** (7) enabling students to understand language-learning tasks ***in*** (8) ***terms*** (8) ***of*** (8) their own style preferences. A second reason that ***familiarity*** (9) ***with*** (9) learning or cognitive styles might be advantageous is that individuals may have different learning strategy preferences ***depending*** (10) ***on*** (10) their style (Ehrman 1990; Galloway and Labarca 1990; Gardner 1990; Oxford 1990). That is, students who exhibit a style such as field independence are probably ***using*** (11) different ***strategies*** (11) ***for*** (11) identifying and selecting information in learning tasks than students who ***tend*** (12) ***to*** (12) be field dependent. Learners who are ***familiar*** (13) ***with*** (13) their personal styles for learning may be able to ***select*** (14) ***from*** (14) their repertoire of learning strategies the ones that are most personally ***suitable*** (15) ***for*** (15) particular learning tasks.

INSTRUCTIONS FOR PATTERN ANALYSIS:

The form on page 58 is designed so that either the instructor or each student may analyze the errors that have occurred within or across the relational processing exercises to look for error patterns based on:

1) conceptual category
2) syntactic category
3) level of text processing

A RECORD SHEET FOR ERROR PATTERN ANALYSIS may be xeroxed for each student and handed out at the time that a relational processing exercise is corrected. It is recommended that students who have more than a 15% error rate on an exercise use the ANALYSIS provided on the teacher's answer key to list their errors with the analysis for each, to see if their are any patterns in their errors. Particularly if the errors are occurring within a certain type of CONCEPTUAL relation, they may then turn to *The ESL Handbook On Relation Structure* to study that area in more depth. If the error pattern is related more to a syntactic category they may use a grammatical handbook recommended by their teacher. The level of processing will indicate if the students have difficult recognizing relations that involve a certain level of processing (e.g. they may make a lot of errors at the phrase level with prepositions; or clause level errors with subordinating adverbs) or distance between a proform and its antecedent.

If a student has fewer errors or no pattern appears within the analysis of one exercise, then the errors are random and not likely due to any gap in learning or understanding of either the conceptual or syntactic categories of English. However, it may be the case that after analyzing the errors of two or three exercises that a pattern may emerge.

A 15% error rate is 8 errors or more on an exercise with 55 testing probes and 9 errors or more on an exercise using 60 testing probes.

From the teaching perspective, it may be helpful to collect the analyses from the class to see if the majority of the students are making the same types of errors, though perhaps not in exactly the same place in the text. These categories are also helpful when working on revision and editing with your students. They may want to adapt the record sheet to revising, by listing types of relations they are not using enough or using incorrectly in their writing.

RECORD SHEET FOR ERROR PATTERN ANALYSIS:

No.	Word	Relation Type	Syntactic Category	Processing Level

Text Sources

Aasang, N. (1991). Leo Baekeland & Plastic, *Twentieth-Century Inventors.* New York, NY: Facts on File, Inc.

Brandt, W. (1986). *World Armament & World Hunger: A Call for Action.* London, Great Britain: Victor Gollancz Ltd.

Laurence, M. (1971). Where the World Began. In Rosengarten & Flick, Eds. 1987. *The Broadview Reader.* Peterborough, Canada: Gagne Ltd.

Lewis, C.S. (1962). *The Problem of Pain.* (Paperback Edition). New York, NY: Macmillian Publishing Company. (original work published in 1940).

Mescon, M.H., Albert, M. & Khedouri, F. (1985). *Management.* Second Edition. New York, NY: Harper & Row, Publishers.

O'Malley, J.M. & Chamot, A.U. (1993). Learner Characteristics in Second-Language Acquistion. In Omaggio Hadley (Ed.) 1993. *Research in Language Learning: Principles, Processes, and Prospects.*(pp. 96-123) Lincolnwood, IL: National Textbook Company.

Phillips, A. (1997). The English-only debate. *McLean's.* May 5th, 42.

Stuart, G. E. (1992). Mural Masterpieces of Ancient Cacaxtla, *National Georgraphic, 182, 3.* pp. 120-136.

Appendix 3

Student Handbook

An ESL Handbook

on

Relational Structure

Student Version

by Cynthia A. Caswell

(Pre-publication Version)

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1 Introduction

An ESL Handbook on Relational Structure is designed for advanced ESL writing students. As an advanced ESL student, if you find yourself thinking that English grammar is boring, yet you know that you need to master it in order to improve your writing, then this handbook can help. Its purpose is to teach you to understand how grammatical errors interfere with your ability to communicate meaningfully through writing. Meaningful communication can not be achieved without grammar because grammar has a particular kind of meaning -- *organizational meaning.* In order to communicate effectively in English, you need to organize your ideas according to the usage and style of grammar in the English language.

This handbook discusses organizational meaning. It introduces you to relational concepts which people use to organize their ideas, and then presents a variety of examples which demonstrate the range of grammatical categories that can express each of these relations in the English language. It is designed to help you understand ways to organize your ideas when you want to express complex messages. It is also intended as a resource that will allow you to revise and edit your writing independently. When you understand how to use relational structure to organize your writing, you can make English grammar work for you, to convey the message you intend.

1.1 RELATIONAL STRUCTURE

The descriptive system presented in this handbook is called *a natural class framework for relational structure*. It has been created on the basis of linguistic research in the field of conceptual semantics. Semantics is the study of meaning. Conceptual semantics explores meaning from the perspective of our human senses and the way those senses organize our view of reality. Our sense of vision, our self perception, and our social perceptions are very important to the way we organize what we know, and this conceptual organization is actually very clearly reflected in our language abilities.

The word *concept* is a term for an idea or an entity that we are capable of knowing. A relational concept is an idea that represents a relationship between other ideas. The framework for relational structure presented in this handbook identifies and defines relational categories for the way people organize their ideas, and then presents these categories in *natural classes.* There are ten natural classes, each of which has several subcategories.

A natural class is a group of conceptual relations that belong together because they have the same function. For example, temporal relations all organize concepts in terms of their orientation to TIME. It is important to emphasis that the natural classes of relational structure are determined by the natural limits of the human sensory system. This means that our ideas are inherently *organized*, physically, psychologically, and socially. For example, although different cultures may have a different view of the value of TIME or the allocation of SPACE, all people, regardless of their culture or language, do share the general concepts of time and space.

Because our ideas are structured conceptually, they are organized meaningfully before they are ever expressed grammatically in any language. So, these relational categories are relevant for expressing the natural biases and generalities in the way people of any culture organize their ideas. The purpose of this handbook will be to assist you, the ESL student, in understanding how English grammar and English words specifically convey these relations. The fact that these categories are valid across cultures, does not contradict the idea that culture has a significant effect on writing. Rather, these categories provide you and your teachers with a basis for describing various ways that content can be organized in writing. They also provide you with a basis for identifying patterns of organization that are characteristic of English language style. The examples in this handbook are not exhaustive, but hopefully they are sufficient to illustrate the point that grammar truly conveys meaning, *organizational meaning*. Without organizational meaning our self-expression would definitely be simplistic and limited.

1.2 USING THE HANDBOOK

Section 2 provides you with an overview of relational structure as it relates to conceptual structure as a whole and to grammatical categories in English. Look in that section for definitions of English terms for grammatical categories. Section 3 provides you with terms, definitions, and examples of English usage for many relational concepts.

This handbook is different than other grammar handbooks because it is organized by conceptual categories, not grammatical ones. You are not expected to memorize all of the relational categories provided in this handbook. However, it is a good idea to become familiar with the ten major natural classes of relations and the organization of the handbook, in order to use it effectively when you revise and edit your writing. The table of contents only gives access to information by the names of major natural classes of relations. However, the index provides further access to information by the names of relational subtypes, by specific English words, word parts, and connective phrases, or by grammatical categories. These options are intended to help you use the manual comfortably and independently.

2 Relational Structure: An Overview

This section of the handbook is intended to provide you with a quick over view of relational structure from two perspectives. The first perspective introduces you to relational structure as a component within conceptual structure generally. The second perspective explains how relational structure, as the structure of meaning, is related to English grammatical structure and the effective use of English grammar to create good writing.

2.1 RELATIONAL STRUCTURE WITHIN CONCEPTUAL STRUCTURE

The term *conceptual structure* is not difficult to understand literally. The word *conceptual* means "having to do with concepts or ideas," and the word *structure,* in this case, means "organization." Still, the term should lead you to ask the question: In what ways are concepts structured? An important distinction in linguistic theory about human conceptual organization is the classification of concepts into two types: relational and nonrelational.

Relational concepts are very abstract and express a limited range of meanings. Nevertheless, the meanings that relational categories do express are very important to your writing, because they allow you to join other ideas together into more complex expressions. Relational categories are chosen to express the arrangement or organization of objects and actions that we perceive. A typical example of a relational concept would be the organizational characteristics in a situation where a man is standing beside a table. The SPATIAL relationship between the man and the table is expressed by the word *beside.* In this example, the word *beside* does not refer to an object, but to the relationship between an object and a person.

Relational categories fall into 10 major classes: IDENTIFICATIONAL, THEMATIC, SPATIAL, TEMPORAL, PSYCHOLOGICAL, LOGICAL, MANNER, COREFERENCE, SOCIAL, and NONLITERAL. Section 3 of this handbook is focused on defining these relational categories and giving examples of how they are expressed in the English language. However, a few fairly self-obvious examples of the relational categories are presented in figure 1. These examples will help you to grasp the nature of the general category so that you will be able to understand its relationship to grammar in the discussion that follows.

RELATIONAL CATEGORIES

Main Category	**Subcategory with Example**
IDENTIFICATIONAL:	Attributive - The cat ***is*** brown.
THEMATIC:	Beneficiary - Mike picked up the package ***for*** Bill.
SPATIAL:	Distribution - Garbage was littered ***all over*** the field.
TEMPORAL:	Chronological - ***Before*** you leave, talk to your father.
PSYCHOLOGICAL:	Attitude - I ***doubt*** that you will get a reply from him.
LOGICAL:	Comparative - Alice is ***smaller than*** Rosy is.
MANNER:	Basic - The woman spoke ***in*** a harsh, raspy voice.
COREFERENCE:	Personal - The king ... ***He*** made a new law.
SOCIAL:	Kinship - The ***sister of*** Max is Marie.
NONLITERAL:	Idiom - Let's ***hit the road!*** (Means: Let's leave...Let's start driving, etc.)

Figure 1

Nonrelational categories are identified as THINGS, ACTIVITIES, PROCESSES, STATES, and PROPERTIES. In contrast to relational categories, these categories usually express entities which we would commonly identify as the distinctive parts or the objects that we see in a picture. In the example which was given previously of a situation where a man is standing beside a table, the words *man* and *table* are expressions of nonrelational categories in that conceptual arrangement. The verb *standing* expresses a physical *state*, which is also a nonrelational category. Figure 2 provides you with an overview of the major nonrelational categories and provides examples of a few words that are other examples of this category.

Nonrelational concepts are expressed through words that are typically judged to be highly concrete and very *meaning full*. These words are also known as **content** words. The content of your writing is obviously **what** you want to write about, whereas the ***connectives*** that you use to organize that content are relational concepts. Learning to distinguish between these two basic types of concepts and learning how they relate to grammar should help you write better.

NONRELATIONAL CATEGORIES

Main Category	Subcategory	Word Examples
THINGS:	- Inanimate Objects	stone, book, car
	- Animate Objects	deer, lion, cat, mouse
	- Person/People	man, woman, Bob, Lucy
	- Abstractions	philosophy, belief, policy
	- Places	city, country, Geneva, France
	- Simple Events	Christmas, parade, war
	- Situation	crisis, famine, flood
ACTIVITIES:	- Actions	bring, take, hit
	- Achievements	produce, create, compose
	- Motion	go, move, walk, fly
	- Transactions	get, give, receive, buy, sell
	- Communication	announce, tell, whisper
PROCESSES:	- Change of State	soured, bloomed
	- Event Series	reviewed, deliberated
	- Mental	thought, evaluated
STATES:	- Existence	be, remain, exist
	- Derived	tanned, broken
	- Natural phenomenon	storm, rain, snow
PROPERTIES:	- Ambience	moody, quiet, good, bad
	- Color	red, black, white, purple
	- Quantity	one, two, three
	- Size	large, small, wide
	- Shape	round, square, oval
	- Substance	wooden, metal, plastic

Figure 2

2.2 CONCEPTUAL CATEGORIES AND GRAMMATICAL CATEGORIES

Just as conceptual structure is divided into two main types of entities, relational and nonrelational, grammatical structure is also divided into two main categories called **lexical** and **functional** categories. In order for you to express your ideas, you have to put concepts into specific grammatical categories. Since there is no one-to-one relationship between specific conceptual categories and specific grammatical categories in any one language or across languages, you might think that there is no pattern to the way that concepts relate to grammatical categories. That is not true.

The grammatical categories that belong to the lexical class are nouns, verbs, descriptive adjectives and -ly adverbs. Lexical categories are the grammatical categories that you need to use to express nonrelational entities: things, activities, processes, states, and properties. Nonrelational concepts are never expressed using the functional categories of grammar.

The grammatical categories that belong to the functional class for English include prepositions, adverbial particles (which include subordinating adverbs), coordinating and correlative conjunctions, articles, pro-forms, modal and auxiliary verbs, and a variety of word forms or parts: mood, tense and aspect of verbs, case marking (including the English possessive marker *-'s)* and agreement marking on nouns. These functional categories are grammatical categories in English that are always used to express relational categories. However, **relational concepts can be expressed through both the functional and the lexical categories of grammar.**

The general limitations on the encoding relationships between conceptual categories and grammatical categories are presented in figure 3.

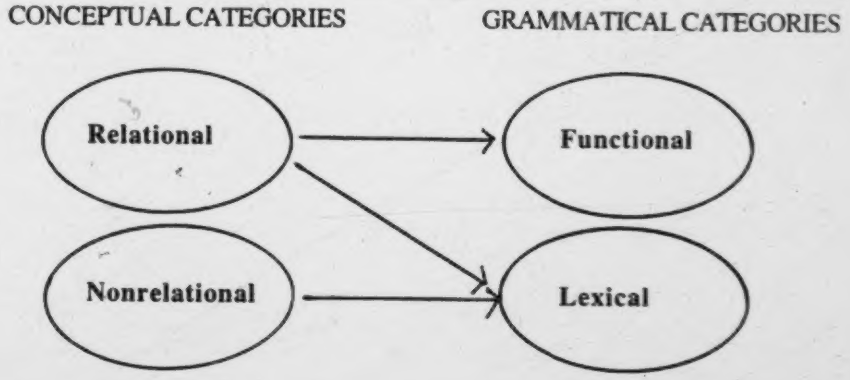

Figure 3 - Encoding Relationships between Conceptual and Grammatical Categories

The use of grammatical categories to encode conceptual relations creates **connectivity** between your ideas when you write. As an advanced ESL student, you should already be familiar with many of the English terms for grammatical categories. But for your convenience, a brief review of grammatical categories for English will now be presented, with definitions and examples of how they encode conceptual relations. These examples do not begin to explain the complex distribution of relational concepts in relationship to grammar. Those relationships are set out in detail in section 3.

***Position**

Position is not a grammatical category. However, the position of phrases with respect to one another or to a specific grammatical category may indicate grammatical relations (which in turn relate to a range of conceptual relations). English indicates grammatical subject and object by how noun phrases are positioned with respect to a verb. Through the position of adjectives within noun phrases, the relationship of properties to objects (or to people or events) can be determined (attributive relation - cf. Section 3.1).

Subject Position	◆ [The unusual, old man] sat down on a park bench.
Object Position	◆ The unusual, old man ate [a sandwich].
Attributive Position	◆ The [unusual, old] man walked away.

Prepositions

Prepositions are function words that come before a noun phrase and show the relationship of the noun phrase to the rest of the sentence.

- Mark threw the newspaper **into** the garbage.
- The police officer took a revolver **from** the desk drawer.

Adverbial Particles

Adverbial particles are also function words. There are three types of adverbial particles: (1) subordinating adverbs (2) verbal particles, and (3) focus particles. Adverbial particles as a group can indicate a wide variety of conceptual relations.

Adverbial particles link a subordinate clause to a main clause. Verbal particles modify the meaning of a verb, but do not have a fixed position. They may follow either a verb or the noun phrase which acts as an object of a verb. Focus particles can be inserted into a variety of positions in a phrase or a sentence, in order to give emphasis.

Subordinating Adverbs

- Marcella disliked the old man **because** he was dirty and smelly.

Verbal Particles

- The construction workers blew **up** the deteriorating building.
- The construction workers blew the deteriorating building **up.**

(Focus) Particles

- **Even** Jane agreed to vote for the new policy.

Coordinating Conjunctions

Coordinating conjunctions are function words that join two items of the same type of grammatical category (i.e. words, phrases, clauses, sentences).

- The dog **and** the cat were fighting with each other.
- John went to the baseball game, **but** Alice went to a movie.

Correlative Conjunctions

Correlative conjunctions are function words that each head up two items of the same type of grammatical category.

- **Neither** his father **nor** his mother knew that Anthony was a member of a street gang.
- **Either** you will come with me **or** you will go straight home.

Articles

Articles indicate the boundary of a noun phrase and mark a concept as being either definite or indefinite. Because an article signals that a noun phrase is beginning, when we encounter one, we also begin to infer the relationship of that noun phrase to the other concepts in the sentence. (In many other languages, articles bear case marking which indicates grammatical and conceptual relations.)

Definite

- **The** newest book that I have is a mystery novel.

Indefinite

- **A** white car is difficult to keep clean.

Pro-forms

The term pro-form covers a variety of **content-reduced** words that may be used as **substitutes** for other content words. The term *content-reduced* means that these word forms are indefinite in their meaning and are only marked for basic agreement features like gender, person or number (e.g. he, she, these, this). Pro-forms encode coreference relations (cf. Section 3.8).

In descriptive grammar these words are called pronouns and limiting adjectives. Other grammarians prefer to call them *pro-forms* because many pronouns are actually more than just nouns. They also bear case-marking which indicates their relationship to the verb (subject or object) or to other nouns (possession) in a sentence.

Pronouns

- John just moved here, and already **he** is the captain of our football team.
- **Whose** bouquet of roses was left behind?
- **That** was an unusually good movie.

Limiting Adjectives

- **This** version of computer software is already out of date.
- **Any** person who has not completed this chapter must finish it for homework.

Modals

Modal verbs are used to convey a psychological or logical relation between the writer and/or some other person and the content of a text.

- He **may** live through the night. (Psychological.probability relation)
- He **can** speak five languages. (Logical.abilitative relation)

Auxiliary Verbs

Auxiliary verbs (be, have, do, will) have no content or meaning, they simply are carriers of tense, which is an indicator of the temporal location of the event or state in the sentence. They accompany a main verb which does have content.

- Joan **was** sleeping, when the house caught on fire.
  (Temporal - location - past)

Word Forms and Suffixes

In some cases, the form of a word or a suffix attached to it will be the indicator of a relational concept.

Mood

In English, **the form of the verb** changes to indicate mood, which in turn may indicate psychological relations between the author and content.

Indicative Mood
- He **is** unhappy. (statement - assertive, believed to be true)

Subjunctive Mood
- If he **were** happy... (hypothetical - unassertive, doubtful)

Tense

Tense is indicated sometimes by the **form of a verb or a suffix**. Tense is one grammatical indicator of the temporal-location relation.

Verb Form
- Yesterday he **bought** flowers and today he **buys** flowers again.

Suffix - **ed**	◆ Because we won when I **played** basketball yesterday, I play on first string today.

Aspect

English makes only very limited use of aspect marking compared to many other languages. It is a **suffix** on a main verb which indicates two of the relational subtypes for the natural class of manner -- progressive and completive.

Progressive **- ing**	◆ Andrew is watch**ing** a football game.
Completive **- en**	◆ The vase was **broken**, when I arrived.
Completive **- ed**	◆ I have **played** that game many times before.

Suffix -ly

The **-ly suffix** is not considered a functional category. However, it does encode the relational category of manner, which signals that a nonrelational property concept is being linked to an action, a state or an event.

Manner	◆ Children tru**ly** believe in Santa Clause. (The psychological state of believing is true or real, not the children).

Marker - 's

The -'s marker usually indicates the thematic relation of possession when is added to nouns. However, in a complex **nominalization** structure it can indicate other thematic relations like agent, experiencer or patient. A complex nominalization structure encodes an event, state or action as a noun instead of the verb. (cf. Section 3.2 for on thematic relations)

Possession	◆ John**'s** notebook is lying on the coffee table.
Nominalization	◆ The president**'s** resignation was totally unexpected.

Case

English has only a few remnant forms of a case marking system left. Subjective, objective and possessive case-forms exist for some of the pro-form categories.

Subjective Case	◆ **She** will be coming back in five minutes.
Objective Case	◆ I want **you** to give this textbook to **her.**
Possessive Case	◆ **Whose** car is parked in my spot?

Agreement

Again, compared to many other languages, English has only the remnant of an agreement marking system. Agreement marking occurs between the subject and the verb only for the 3rd person singular in English (e.g. She plays.). However, agreement in number, person, and/or gender between pro-forms and their antecedents is an important for establishing the correct coreference relationship for your reader when you are writing.

An **antecedent** is a word or words to which a pro-form refers and which precedes the pro-form in the text. Antecedents are underlined in the following examples.

- Mavis was tired, so **she (female, 3rd singular)** went to bed.
- Tom and Fred met me at the theatre, but **they (3rd plural)** were late.

Adverb (base + -ly))

Adverbs modify verbs. The base or root meaning of -ly adverbs typically encodes a property concept. However, it can also encode relational concepts of a variety of types. Logical, psychological and manner categories appear commonly in the adverb base.

- The senator will **probably** resign from his office.
  (Logical.probability)
- **Finally,** I need your signature on this contract.
  (Logical.conclusive)

Adjectives

Adjectives modify nouns. They most typically express properties. However, they can also encode spatial, temporal and other relations.

Spatial	◆ A beautiful garden is in the **outer** courtyard.
Temporal	◆ The results from the **previous** blood test were negative.

Nouns

Nouns typically encode places, persons or things. In terms of relational categories for English, nouns commonly express logical, psychological, and temporal categories.

Logical	◆ In **conclusion**, we make the following recommendations...
Psychological	◆ I have **doubts** whether or not I will complete this exercise on time.
Temporal (Object)	◆ This **week** I have five assignments due.

Verbs

Verbs most commonly encode actions, states or events. However, they can also express relational concepts of many types. One or two examples are given here. Many more are presented in Section 3.

Copula as Equivalent-to	◆ Tom Howard **is** the new mayor.
Temporal	◆ Thunder **follows** lightning, when it storms.

Prepositional Phrases

When relational concepts are encoded as lexical categories, and particularly as nouns, they often can not be directly placed into the sentence structure, but must be linked in by a preposition.

(Prepositional Phrases continued)

- **In conclusion,...**
- **By specifying that ...**
- **By five o'clock, ...**
- **sister of**
- **angry with or at (someone); angry about (something)**

Because any type of grammatical category can encode a conceptual relation, you can best determine which words are important for expressing English language **connectivity** by being familiar with relational concepts. From a grammatical perspective, it is important to pay attention to how you use functional categories when you write. Note how other writers use them in the things that you read.

2.3 FUNCTIONAL CATEGORIES IN L2 READING AND WRITING

As an adult second language learner, you are already proficient at expressing relational concepts and organizing your ideas with the grammatical patterns that are natural to your first language. As an advanced student, you can likely recognize all of the relational words and word-parts that belong to the functional categories of English. Recognition of a function word, however, is not the same as having full recognition of all the relations it may express. Considerable time and exposure to English usage through reading is necessary to learn the full range of meanings and patterns that are connected with any given function word or word part.

Because function words and word-parts occur in text with far more frequency than content words, your ability to use relational categories in your first language was already a fairly automatic skill before you began to learn English. Since your use of relational expressions is so automatic in your first language, it may interfere with your learning of English relational patterns.

However, it is also important to remember that your ability to use relational-functional categories when reading and writing in your first language should not have entirely negative effect on your second language learning. Literacy skills in a first language are known to have a positive effect on literacy development in a second language. Successful use of your mother tongue and literacy knowledge is dependent upon your own awareness as learner and your ability to adapt your reading and writing strategies to a second language situation.

At a superficial level, function words and word-parts are very simple to recognize. But they are often difficult to understand precisely because they are ambiguous and have complex spheres of usage. Sections 2.4 and 2.5 will discuss these difficulties in detail.

The Meaning of Relational (Function) Words:

How would you explain the meaning differences of the highlighted function words in these examples:

1. a. We are going **to** the store.
   b. Give the shoes **to** Bill.
   c. He bought the flowers **to** impress her.

2. a. **For** Bob to be late was unusual.
   b. Joe bought flowers **for** Mary.
   c. Jim bought flowers **for** Joe to give to Mary.
   d. There is a need **for** a new policy.
   e. **For** he's a jolly good fellow....
   f. Jill was angry **for** her work load was unbearable.

3. a. The boat swung **about**.
   b. He lectured **about** the American civil war.
   c. The bus comes at **about** 3:15 p.m.
   d. The child ran **about** the room, screaming loudly.

4. a. **Their** house was burned down.
   b. **They're** unhappy about it.
   c. **There** is a fine sunset, if I ever saw one.

Figure 4

2.4 FUNCTION WORDS AND AMBIGUITY

Function words, like the majority of words in a language, are ambiguous. When a word is ambiguous, it means that it has several meanings and its exact meaning must be determined in the context of other words. Function words are likely even more ambiguous than most content words. Furthermore, because they represent very abstract relations, it can be more difficult to identify the exact relation they convey than to identify the specific meaning of a content word, even when you have the help from the other words which create a context.

To understand the notion of ambiguity better, let us first consider a content word example. The word *bank* can mean (1) the ground at the edge of a river; or (2) a financial institution; or (3) a building where money is deposited and withdrawn. The presence of other content words in a sentence, like *river* or *money*, assist you in determining the exact meaning of the word in context. Now, consider the exercise for English function words (in figure 4).

An answer key for this exercise, based on the relational categories taught in this handbook, is available at the end of this section. If you found it difficult to express the meaning differences between the specific uses of these function words, the framework of relational categories which are presented in section 3 of this handbook can help you to communicate more clearly about those abstract relations and the organizational structure of text, in the English language.

2.5 FUNCTION WORDS HAVE COMPLEX SPHERES OF USAGE

Another important characteristic about any word is its **sphere of usage.** The sphere of usage for a word is the variety of meanings it can express and the range of grammatical patterns in which it may occur. The reason that sphere of usage is important to you as a second language learner is that the spheres of usage for any pair of words rarely overlap completely between a first language (L1) and a second language (L2), as figure 5 demonstrates. This is true for all words, but it is especially common for function words and word parts.

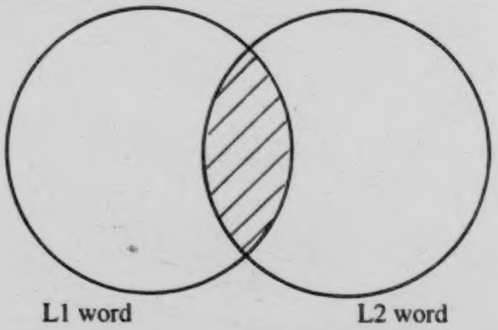

Figure 5 - Partial Overlap in Spheres of Usage

Lack of overlap in meaning and use between function words and word-parts is common even for closely related languages like German and English. The use of prepositions and case in those two languages is a good example. Consider the following brief comparison between English and German regarding the English preposition *in (into):*

English Expression	German Expression
I will go ***(in) to*** the office today.	...***ins*** Buro (in + accusative case - das = ins)
Speak ***in*** English!	...***auf*** Englisch (auf)
In the winter,...	***Im*** Winter (in + dative case - dem = im)
I live ***in*** the country.	....***auf dem*** Land (auf + dative case - dem)

These kinds of differences in function word patterning exist for every language pair, including your first language and English. There are patterns for the usage of each connective word in both languages; but there is only partial overlap between the patterns across languages. Some of the grammatical or connectivity errors that you make when writing and speaking may happen because you think you know an English translation equivalent of a function word from your first language, but the meaning for your L1 function word and the English function word you have chosen do not overlap in that area of usage.

This type of error is called interference, because your first language knowledge interferes with your learning of English patterns of usage for function words. Awareness that the patterns of usage for your L1 function words are not directly comparable to English patterns of usage can help improve the grammatical accuracy of your writing.

Another common problem you will face as an ESL student is to learn where English function words and word-parts do and do not overlap with each other, as demonstrated by figure 6.

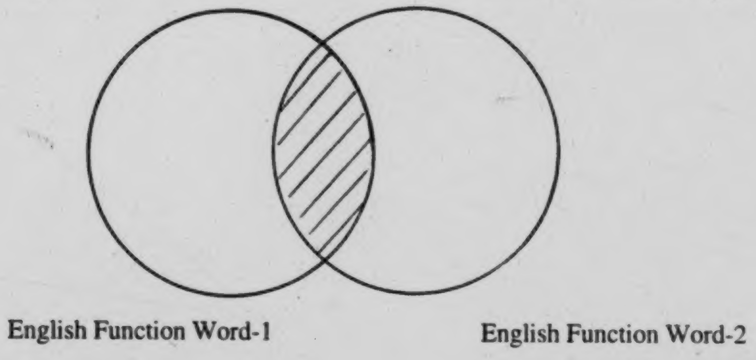

Figure 6 - Partial Overlap in Spheres of Usage for Two English Words

In certain contexts, two English function words will express the same conceptual relation, but in other contexts their meanings diverge and the words can no longer be exchanged for one another. This can be demonstrated by overlap and difference in the meanings of the two prepositions *over* and *above,* and *under* and *below/beneath.*

Grammatical Usage	Ungrammatical Usage
This box weighs **over/under** forty kilograms.	* ... **above/below** forty kilograms.
It is five degrees **above/below** zero.	* ...**over/under** zero.
They hung the light **above/over** the table.	
They set the boxes **under/beneath** the table.	

When you use the wrong English function word because it overlaps in meaning with another English function word, this is called a developmental error. You correct it by learning the distribution of each English function word, noting specifically where the function words overlap and differ from each other in meaning and usage. You also overcome this problem by paying attention to phrases or groupings of words. When you are learning content vocabulary you need to pay attention to the function words that occur in context with that new vocabulary.

2.6 SUMMARY

In this section you were given an overview of the ten major natural class categories of relational structure. These relational categories were contrasted with the nonrelational categories of conceptual structure to help you grasp the nature of organizational meaning. After learning that concepts are organized according to relational and nonrelational categories, you also learned that grammar is also divided into two main category types, lexical and functional categories. Then, the way that conceptual categories are encoded in grammatical categories was briefly discussed. You learned that relational concepts can be encoded in both types of grammatical categories. However, nonrelational categories are only expressed through the lexical categories of grammar. A brief review of English grammatical categories was provided for you with examples that encoded relational concepts. Finally, it was noted that function words are easy to recognize but difficult to use properly. This difficulty arises from the fact that function words are very ambiguous and they have complex spheres of usage. The problem of ambiguity was demonstrated through a special exercise. The partial overlap in spheres of usage for function words between languages and within the English language was demonstrated with examples. The purpose of this overview of relational structure was to prepare you to understand section 3, which explains relational categories in detail.

Answer Key for Relational (Function) Word Exercise

1a. Thematic-goal; Spatial-path-bounded; 1b. Thematic-recipient; 1c. Logical-purpose.

2a. Structural - required for infinitive clause; 2b. Thematic-recipient; 2c.Thematic-beneficiary; 2d. Logical-elaboration or Theme-basic (links what is needed...); 2e. Logical-reason (dated British usage); 2f. Logical-reason.

3a. Spatial-path-directional; 3b. Logical-elaboration; 3c. Logical-approximation; 3d. Spatial-path-unbounded/directional.

4a. Coreference-possessive; Coreference-personal relation contracted with an Identificational-attributive relation; Coreference-demonstrative.

3 Natural Classes in Relational Structure

This natural class framework of relational categories has ten major classes of relations: identificational, thematic, spatial, temporal, psychological, logical, manner, coreference, social and nonliteral. Each of these major classes has a variety of subcategories that define very specific conceptual links. Definitions for each of the major classes are provided, then definitions of the relational subtypes are provided with examples that indicate the range of grammatical categories that may be used to express each relation in English. The subcategories in each natural class section are organized alphabetically, for ease of concept location.

3.1 IDENTIFICATIONAL RELATIONS

Identificational relations are conceptual links that you use to create the specific identity of a nonrelational entity, usually an object, person or event. You establish the identity of something by linking properties or characteristics to it, by classifying it with respect to other entities, or by equating it with a synonymous concept. So, there are three subtypes of identificational relations: attributive, equivalent-to, and instance-of.

Attributive An *attributive* relation connects a property, attribute or characteristic to an object, person, or event.

Copula The verb *to be* links a property to the concept it identifies.

- The light ***is*** yellow. (object - attributive - property)
- War ***is*** cruel. (event - attributive - property)

Position A property, when expressed by an adjective, may be positioned, either between an article (or a quantifier) and a noun, or just before the noun.

- The ***bitter*** oranges made very ***sour*** juice.

Adjective phrases expressing properties may also be placed in apposition to a noun phrase, with a specifying word to link them (e.g. both - LOGICAL-inclusive). This type of construction may assume the ellipsis of the noun head (one, ones) in the appositional phrase.

- Youth, both ***hardworking*** and ***lazy,*** lack jobs because of the current economic crisis.

Emphatic

One way to emphasize the attributive relation is to express it as a noun, with the specific attributes listed in apposition. The nominal terms, *characteristic, property, quality* - are other nominal options for expressing this link.[1]

- His ***attributes,*** friendliness, trustworthiness, and patience, were significant.

Another way to emphasize the attributive relationship is through the phrasal verb *described as.*

- He was often ***described as*** arrogant, insensitive and rude.

Note: For expressions that indicate inherent attributes see examples on the THEMATIC-possessor relation.

Equivalent-to

An *equivalent-to* relationship links two concepts and identifies them as referring to the same entity.

Copula

The verb ***to be*** may also indicate the equivalent-to relationship.

- The morning star ***is*** the planet Venus.
- Bill ***is*** my brother.

Emphatic

This conceptual relation may also be emphasized by expressing it as a verb *to equal.* Use of the verbal term is common in mathematical language.

- Five loonies ***equal*** a five dollar bill.

Note: The adjective *equal, equivalent* or the noun *equivalence* implies a comparison (cf. LOGICAL-comparative) that yields a judgement of 'sameness' in some property of the objects, like size, ability or quality, but usually does not have to mean total equivalence of identity. The same is true for the adverbial form *equally.*

Instance-of

An *instance-of* relation links a generic (type) or more general category to a specific instance (token) of that concept. It generally indicates the hierarchical relationship within classification systems that may recur at a variety of levels of specification (more general to more specific labels), depending upon the system of classification used.

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[1] Unless the apposition structure is used the nouns are simply synonyms for the nonrelational entity - the PROPERTY itself.

Copula

The verb *to be* also indicates the instance-of relation.

- The dog ***is*** a mammal. (subcategory - instance-of - superordinate category)
- My pet, Ginger, ***is*** a cat. (token - instance-of - type)

Compound

The instance-of relationship may also be expressed within an appositional compound, a structure which is often used for titles.

- The ***Foreign*** Minister spoke to the press.

Emphatic

The instance-of relationship may be emphasized by using noun phrase expressions like *type of, instance of, classification of, superordinate-class, subordinate-class,* or verb phrase expressions like *identified as, classified as, grouped with, etc.*, where it takes on the additional meaning of identifying by a formal process. Specific classification systems use nominal terms such as *genus, order, species, breed,* etc. If you are writing a scientific paper that involves classification, find the terminology that is appropriate to your field.

- What ***type of*** fruit do you like to eat?
- This sample should be ***classified as*** igneous rock.

With Membership

When the instance-of relation is emphasized, being expressed as a noun, it may be accompanied by terms that express inherent possession via membership in a group, particularly when the identification involves living entities (cf. the *THEMATIC-possessor* relation).

- The panda ***species*** belong to the bear family.

Complex Identity

For the linking of complex events and states to other concepts for the purpose of IDENTIFICATION, cf. COREFERENCE-relative relations on pages 83-84.

Identificational Relations in Text

In the context of an extended text, the reader can usually determine whether or not the copula (verb *to be*) should be interpreted as representing an attributive, instance-of or equivalence relationship. However, it is possible that more than one of the subtypes are implied in a text that deals with classification. Consider the following text:

Dolphins in Crisis

by Kenneth S. Norris - *National Geographic, September 1992*

...I frequently found dolphins regarded as just another **kind of** fish. The statistics are appalling -- so many thousands drowned in this **kind of** gear, so many hundreds harpooned in that fishery -- but on the commercial **level** there are few pangs of conscience; nearly every human society has grown used to killing fish.

The trouble is, dolphins **are** not fish at all. They **are** mammals, smaller **relatives of** the great whales. And some dolphins **are among** the most intelligent animals on the planet ...

Whales, dolphins, and porpoises together **make up the order** known as Cetacea. Thirty-seven **species of** dolphins are scattered throughout the world's oceans and inland waters, both cold and warm, and in rivers and bays.

Note: **bold print** - the word itself indicates an identificational relation
underlined - the identificational-attributive relation is indicated by the position of the word or phrase

3.2 THEMATIC RELATIONS

Thematic relations indicate the role that persons and objects, both animate and inanimate, fulfil in relationship to an action, state or experience. There are twelve types of thematic relations: agentive, associative, basic theme, benefactive, experiencer (affected and reactive), goal, instrument, patient-affected, possessor, recipient, resultant, and source.

Adversative An *adversative* relation indicates that an action has been conducted or an event has occurred to the detriment or harm of a person. It is the opposite of the benefactive relation.

Preposition The preposition *on* indicates the adversative relation.

- Alice tattled ***on*** Michael.
- Matthew's car broke down ***on*** me.

Agentive An *agentive* relation connects an animate being, capable of action, to an action or event.

Position In English, an agent usually is expressed through the subject position.

- John pushed a barrel down the road.

Preposition When a writer does not want to emphasize the agent in a sentence, it can be 'demoted' using the passive verb form for the action and using the preposition **by** to indicate agency.

- A barrel was pushed down the road ***by*** John.

Possessive In complex nominal expressions, where the *'s* possessive marker is attached to a noun, the marker indicates agency if the progressive form of the participle, that is functioning as a noun, expresses some type of action.

- John*'s* complaining about the weather is irritating.

Emphatic The terms *agent* or *agentive relation* are usually used only in linguistic writings, as metalinguistic terms, to discuss conceptual relations. The use of *agent*, as a noun, in nontechnical English does not refer directly to a conceptual relation. Normally, it denotes a representative from an agency, a business which acts as an intermediary for people (e.g. an insurance agency - insurance agents).

Associative An *associative* relation connects a participant in an event to the action and any other participant(s) within that event. The *association* may be positive, negative or neutral in its perspective, depending upon the context or meaning of the verb. In many events, participants may take a side. In such cases, the associative relation co-occurs with a LOGICAL relation, either *affirmation* or *negation* (cf. LOGICAL relations - section 3.6).

Prepositions The prepositions, ***with***, ***without***,***against***, and ***between*** in certain contexts, indicate the associative relationship.

- Ben walks ***with*** Joe to work everyday.
- Who(m) do you work ***with*** ? (informal); ***With*** whom do you work? (formal)
- Joe always fights ***with*** Brad.
- The Americans fought ***with*** England ***against*** Germany and Japan in World War II.
- There was an argument ***between*** Frank and Bill.
- Jane went shopping ***without*** us.

An *associative* link may also connect an abstract concept to an event.

- Someone anonymously submitted an argument ***against*** the policy change.

Basic Theme The *basic theme* relation links a concept to an action or experience when that concept is itself an *event* or *abstraction* of *textual thematic importance.* It may also link an object that is an *inanimate stimulus* to an experience.

Position The subject position of the sentence also usually conveys the theme.

The politicians were not expected to reach an *agreement*. So, *the settlement* of the land claim issue was welcomed by all the peoples of the Middle East.

- The rock formations fascinated us. (stimulus - experience - experiencer)

Preposition A basic theme can also be de-emphasized (like an agent) and be linked into the larger conceptual structure by the preposition *by*, with a passive verb form.

- Active: The policy confused the people. (abstraction)
- Passive: The people were confused ***by*** the policy.

Benefactive A *benefactive* relation connects the person or place (institution) which receives benefit through an agent's action. It indicates an agent who is acting on behalf of someone else, rather than for his or her own benefit.

Preposition The preposition, ***for***, in certain contexts, indicates the benefactive relationship.

- Joe bought roses ***for*** Bill to give to Mary.

Position

The subject position in a sentence indicates the benefactor, only when the concept of benefit is expressed as the verb of the sentence (e.g. to benefit, to profit).

- The company ***benefitted*** from the Free Trade Agreement.

Emphatic

The previous example regarding sentence position and the verb is an emphatic expression of the *benefactive* relationship. It is also emphasized through nominal expressions such as: *for the benefit of, by benefitting...*

- The Prime Minister acted ***for the benefit of*** all of Canada.

Exchange

The *exchange* relation indicates an object or action given to match or exceed the value of another object or action received.

Preposition

The English preposition *for* and the compound *instead of* indicate the exchange relationship.

- He bought the leather chair ***for*** $250.
- Marcia ate fruit ***instead of*** candy.

Emphatic

To emphasize the exchange relation, the following phrases are common: *in exchange for, exchange... for, in place of.* When expressed as a verb it denotes a process, for example:

- He returned her diary ***in exchange for*** his peace.
- While ***exchanging*** goods ***for*** furs with the natives, the explorers also learned some of the Iroquois language.
- Harold left the china vase on the table, ***in place of*** the one he had broken.

Experiencer

An *experiencer* relation indicates the person or animate being who is passively affected or actively reacting to an experience. This relation is also used to indicate the linking of persons or beings with their psychological orientation (e.g. hope, despair) to an event. Whether or not a person is viewed as an *affected* or *reactive* experiencer is more than just a matter of perspective. The categories differ in that a *reactive experiencer* has a measure of control over the experience.

EXP-Affected

An *experiencer-affected* relationship links a person to an experience that stimulates a response in the individual. The stimulus is external to the person and the individual has no control over the event.

Position

The subject position in a sentence indicates the experiencer if the verb is passive. The object position indicates the experiencer-affected in a sentence using an active verb (when the verbs indicate psychological orientation - cf. the section on PSYCHOLOGICAL relations - section 3.5).

- The storm frightened Mary. (object position)
- Mary was frightened by the storm. (subject position)

When a verb expresses an experience with or without indicating a cause or stimulus, the subject position will still indicate the *experiencer-affected* relationship, in English.

- Jonathan died yesterday.
- Randy suffers from cancer.

EXP-Reactive

Sometimes the meaning of the verb carries with it the concept that the person or being *stimulates their own psychological orientation*, even through there is no sense of 'action'. If there is some inherent notion of internal causation and control over the experience, then an *experiencer-reactive* relationship is required.

Position

The experiencer-reactive relationship is also usually expressed by the subject position in the sentence.

- The ambassador hopes for peace.

Possessive

In complex nominaliation structures, where the *'s* possessive marker is attached to a noun (e.g. Mike's), the marker indicates the experiencer relation, if the progressive form of the participle (e.g. liking, hating) indicates some type of experience.

- Mike*'s* liking basketball surprized me.

Goal

A *goal* relation connections a place or object, the end point of a motion, to the action that conveys the movement. In this conceptual framework, goals are nonhuman; all human actions that receive something as the result of a transaction are linked to the action by the *recipient* relation. Goals and recipients are expressed by the same grammatical form in English, however, in some other languages, they do have a separate grammatical manifestation.[2]

Preposition

In English, the goal relation is indicated by the preposition *to* or *at (intended goal).*

- Mail is delivered ***to*** the factory.
- We walked ***to*** the bank.

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[2] In German, the recipient relation is indicated by the dative case and the goal relationship is indicated by the accusative case, combined with a preposition).

(Goal, continued)

- You shoot ***at*** the target.

Instrumental

An *instrumental* relation links an object used to achieve an action with both the action and the object or person affected by the instrumental object.

Preposition

The prepositions *with* and *by* indicate the instrumental relation in English.

- Mat pounded the nails ***with*** a hammer.
- The policeman was wounded ***by*** his own gun.
- The child was unintentionally hit ***by*** a baseball.
- *but:* Maxine was hit by John, ***with*** a long stick.

Patient

The *patient* relation connects the object or person affected by an action to that action. It may also link a product that results from a process to the process which produced it.

Position

In English, the patient relation is indicated by the object position when the action is conveyed by a verb in the active voice.

- Mike hit the ball. (active verb - object position)
- The cow kicked Randy. (person - as patient - object position)
- Bill composed a song for Jane. (product - as patient)

Preposition

In nominalization constructions, where an action or event has been expressed by a noun, the preposition *of* will link the patient to the nominalized concept.

- The evacuation ***of*** the city took twenty days.
- The emancipation ***of*** the slaves was important to Abraham Lincoln.

Emphasis

A patient may be emphasized by using the passive voice for the verb, so that the patient is placed in subject position in the sentence.

- The city was evacuated with the help of military personnel.

Possessor

The *possessor* relationship connects a person or entity who owns, controls or inherits the possession involved. It also indicates partative membership, linking a member to a group or a part to a holistic entity.

Verbs

There are several verbs used to indicate possession. The most common is the verb *to have.* Other verbs that indicate possession are *to belong to, to own, to inherit.*

- A Dutch prince ***owns*** this castle.
- I ***have*** the new text book.

Possessive

The *'s* marker also indicates the thematic possessor relation.

- John***'s*** book has only recently been published.

Preposition

The preposition *with* may be used to indicate possession of a characteristic or distinguishing feature, or an accompanying object. The preposition *of* may indicate possession if it links a part to its whole.

- In ancient Egypt, a woman ***with*** a long, thin nose was considered beautiful.
- The messenger arrived, ***with*** good news.
- The door ***of*** the car was scratched. (part - possessed by - whole)

Attributes as Possession

The physical characteristics of a person, animal or thing are inherent attributes which may be expressed as the possession of an entity, using the verb *to have.*

- The old man ***had*** pale blue eyes.

Emphatic

Phrases that can be used to emphasize the possessor relation are *take possession of, the possessor of, being the possessor of, possessing* (participle) and *the owner of.*

- ***Possessing*** a new home was not enough to satisfy Mary.
- My uncle ***took possession of*** the house in April.
- The ***owner of*** the car was indifferent to its condition.

Recipient

A *recipient* relation indicates the person who receives an object.

Preposition

The preposition *to*, in some contexts, indicates the recipient relation.

- John gave the mail ***to*** Barbara.

Position & Emphasis

The recipient relation can be emphasized by expressing it as a noun, *recipient,* or a verb, such as, *receive, accept, appropriate,* etc. When the relation is expressed as a verb, then the person (s) who receives is place in subject position.

- The student ***received*** an award.
- The winning team ***accepted*** the trophy.

When the relation is expressed as a noun, the object received is usually linked to the noun *recipient* by the preposition *of.*

- The ***recipient of*** this year's alumni scholarship is Marta Liander.

Resultant

A *resultant* relation links an object that is the outcome or result of the action or event that has occurred.

Position

A resultant always occurs as the object of the verb in a sentence, in object position in active sentences and in the subject position in passive sentences.

- I sang ***a song*** for the talent night.
- He ran ***the race*** in excellent time.

Source

A *source* relation links a person or place as a source in an event or it indicates the origin or starting point of a path or an action.

Preposition

The preposition *from* usually indicates a source.

- I came to Canada ***from*** Norway in 1925.
- Father came in ***from*** the fields when my grandparents arrived at the farm.

Emphasis

The concept of source can be emphasized by using the nominal expression *source of, origin of,* or the phrasal verb *originate (in, with).*

- What is the ***source of*** this noise?
- The flooding problem ***originated*** high ***in*** the mountains, where heavy snowfalls had accumulated.

Thematic Relations in Text

Because many thematic relations (e.g. agent, experiencer, patient) are inferred from the position of noun phrases relative to the verb of a clause or sentence, they are often learned implicitly. However, some of these relations are indicated by prepositions (e.g. adversative, associative, beneficiary, goal, source, etc.). The thematic meanings of the prepositions are subject to potential confusion with the other relations that are included within the sphere of usage for each individual preposition. The following text highlights prepositions which are used to express thematic relations. Try to identify the thematic subcategory expressed by each highlighted word:

Supervision or Super Vision?

It had been a typical spring recess at Berrisford Elementary School. Hillory and Jean, **from** Grade 3, refused to let Sally play **with** them, and she was in tears. A group of screaming grade six girls were pursued all around the school yard **by** Boyd and his friends, because they had stolen his cap. Mary Beth tattled **on** Billy, who **had** Rachel's new toy but denied it. Some of the grade five boys delighted in tormenting their female classmates **with** a dead mouse they'd discovered on the soccer field. Matt picked a fight **with** Alex. Then Joe got hit in the head **with** a baseball. "I'm getting too old for all this ruckus, " sighed Mrs. Rosburn, as she closed the door **of** the nurse's office.

3.3 SPATIAL RELATIONS

The categories that belong to spatial relations all indicate the orientation of nonrelational concepts (objects, persons, places, activities, states, events) to one another in two and a half-dimensional space, which is the same sense of spatial organization set by the limits of human vision. The subtypes of spatial relations are: containment, distribution, location (contact, attachment) and path (variations: bounded, directional, extent, route, and reflexive).

Containment The *containment* relation is a complex spatial notion which involves the relating of objects with spatial volume to the matter which fills the space within them. The matter is bounded or contained on at least two out of three dimensions.

Prepositions The preposition *of* (following a noun that indicates a type of container or an adjective describing amount) or the preposition *with* (following a verb that indicates transfer of the matter to a container) both indicate the containment relation.

- The basket ***of*** food was sitting on the counter.
- The pool was already full ***of*** water.
- The farm hands loaded the truck ***with*** wheat.

Emphatic

The verbs *contain*, *hold*, and *have* are examples of the containment relationship expressed with emphasis.

- This pail ***contains*** paste. That one ***holds*** paint.
- This box ***has*** books.

Distributive

A *distributive* relation indicates either a random placement or patterned arrangement of a set of objects within a spatial region or in relationship to the boundary of a spatial-path.

Prepositions

Prepositions which indicate a distributive relationship are: *(all) over, along, around, about, across, throughout.*

- The leaves were scattered ***over*** the field.
- Her clothes were littered ***about*** the room.
- Mack tossed bits of garbage ***along*** the road.
- Dirty dishes lay scattered ***throughout*** the room.
- Weeds grew ***all around*** the place.
- A flock of geese were strung out ***across*** the sky.

Locative

) A *SPATIAL-locative* relation indicates the position of a object in space. or indicates an object as a landmark in relation to another object, an action or an event. (cf. COREFERENCE-relations in section 3.8, for indefinite locatives: where, there, wherever, somewhere).

Prepositions

There are many prepositions that indicate a locative relation with respect to a landmark, without any indication of contact or attachment; each has a specific spatial interpretation:

above

Its locative meaning is: *on top of, in or to a place higher than.*

- The part of the plant that is ***above*** the ground is called the stem.

across

Its locative meaning is: *opposite to a specific location, on the other side of a path.*

- ***Across*** the street, stood the abandoned hotel.

at

Its locative meaning is synonymous with ***in*** or *near (where the landmark is a specific object).*

- The football team stayed ***at*** the hotel.
- Alex waited ***at*** the counter until the waitress came to take his order.

before

Its locative meaning is: *to be in front of an object, person, place.*

	◆ The criminal stood ***before*** the judge.
behind	Its locative meaning is: *to be at the back of an object, person, place, with respect to the line of vision of another.* ◆ The old man hid ***behind*** the dumpster.
below	Its locative meaning is synonymous with *under.* ◆ The part of the plant that is ***below*** the ground is called the root.
beneath	Its locative meaning is synonymous with *under* and *below;* it can also mean that an object is *covered by something.* ◆ Grass can not grow ***beneath*** pine trees, as their roots draw all of the water out of the soil. ◆ The frozen bird lay ***beneath*** the snow.
between	Its locative meaning is: *situated in the middle of two distinct landmarks* (which may be objects or people). ◆ The post office is ***between*** the Royal Bank and the Harry's Supermarket.
in	This preposition indicates *location by containment* for objects which can be located within another object that has volume (cf. SPATIAL-containment for alternate expressions that do not emphasize location). ◆ The cutlery is ***in*** the third drawer.
over	Its locative meaning is: *on top of, higher than, covering a space or object.* ◆ Hang the picture ***over*** the couch. ◆ Throw the cloth ***over*** the table.
under	Its locative meaning is: *lower than, situated beneath or below something.* ◆ You will find a shady spot ***under*** that elm tree.
underneath	Its locative meaning is synonymous with *under, beneath and below,* although it is often used with a landmark that has an arch or curvature (e.g. a bridge, a bed, a table). ◆ Mark searched for dirty laundry ***underneath*** his bed.
within	This preposition may indicate either *location by containment* or location *inside the boundaries* of a region. ◆ The butler stood beside the door to the study and said, "The master waits for you ***within.***" ◆ Even after the proposed boundary changes, this property will still be ***within*** an industrial zone.

(Locative, continued)

Adverbs

These adverbs substitute as a designation for a general place that is located partially by direction. The same words can function as prepositions if they are followed by a direct object.

above

The adverb above means: *overhead, in the sky.*

◆ Look ***above***, mate! See the storm clouds closing in on us.

below

The adverb means: *in or on a lower place, floor, deck; on earth (in contrast to the sky); under the surface of the water.*

◆ The sailor cried out, "There's fire ***below!***"

inside

As an adverb this locative means: *a location on the inner side, a location in the interior of something, indoors.*

◆ Let's meet at the movie theatre. If its raining, I'll wait for you ***inside***.

outside

As an adverb this locative means: *a location or a region beyond a boundary or enclosure; a location on the exterior of a region, outdoors.*

◆ On a warm day, Sheila will spend the entire day ***outside***.

Phrases

A number of prepositional phrases indicate location: *in front of, in back of, in the middle of, on top of, at the bottom of, in place (position) of.* These phrases bring up the concept of inherent faces to objects (e.g. front, back, top, bottom).

◆ Wait for me ***in front of*** the gym doors.

Adjectives

There are also a number of locative relations that can be expressed through adjectives becoming a *property* of an object or describing its surfaces: *inside, outside, inner, outer, front, back, top, bottom.*

◆ She turned on the ***outer*** edge of her skis.

◆ In a race, you want to run on the ***inside*** lane.

LOC-Attachment

Sometimes a locative relationship conveys the concept of *attachment,* when it is combined with an action through which one object becomes *joined to* another.

Prepositions

The prepositions ***to*** and ***on*** may indicate attachment, if the verb or noun meaning requires it.

◆ The gum stuck ***to*** the table.

◆ Gerald hung the oil-painting ***on*** the living room wall.

Adverb

The adverb ***together*** can be used when the attachment is mutual.

- The boards were nailed ***together*** at right angles.

LOC-Contact

Some locative relationships indicate *contact between* two objects.

Prepositions

The prepositions *against, by, on* and *upon* often indicate spatial location with contact between the objects involved.

- The painting was leaning ***against*** the wall.
- Andrew caught the cat ***by*** its tail.
- Muriel set the dishes ***on (upon)*** the table.

LOC-Detachment

The *detachment* relationship indicates separation of an object, piece or element of a thing from an object or group or the whole of which it was a part, and the displacement or relocation of the part/object to a separate or distinct location. It may also mean breaking contact with a surface.

Prepositions

The prepositions *off* and *apart from* indicate a detachment.

- Joel took his dirty clothing ***off.***
- Set the marbles ***apart from*** the other toys.
- Maxine wanted the dog to get ***off*** the couch and sit on the floor.

LOC-Proximity

Some locative relationships indicate *proximity,* an inexact location with reference to a landmark. The relationship is less exact in terms of specifying, direction, distance or a specific surface of the landmark.

Prepositions

Prepositions such as, *by, beyond, beside, near, next to, far from, among,* indicate proximity. *Among,* as a spatial locative, indicates that an object is placed somewhere within a group or arrangement of individual items that appear physically as a collective entity.

- The baseball mitt is ***beside*** my bed.
- The theatre is ***near*** the college.
- His schooner was docked ***among*** the rented boats.
- I left my purse ***by*** the table.

Path

All *path* relations indicate an implicit trajectory (line through space) along which an action or motion occurs.

Path-bounded

A *bounded* path is a path which has either a source or a goal as an obvious end point. In some expressions both end points are specified.

Prepositions

The prepositions ***to*** and ***from*** when combined with a ***verb of motion***, indicate a bounded path relation, as well as the Thematic relations of goal and source.

- The Foreign Minister travelled ***to*** Switzerland.
- The flight returned ***from*** the Carribean Islands at thirteen hundred hours.
- This road runs ***from*** the farm ***to*** the village. (Also, range)
- The child ran ***from*** the stranger.

Path-unbounded

An *unbounded* path has a trajectory with an unspecified source and possibly an intended end point (goal), but it does not specify that any specific end point has been reached. It also indicates movement within a confined space that has no distinct goal or source points on the path.

Prepositions

The prepositions *toward, around, about* may indicate an unbounded path.

- The frightened child ran ***toward*** the house.
- The children ran ***around*** in the courtyard.
- The little girl ran ***about*** waving her arms and laughing.

Path-directional

A *directional* path indicates the direction of motion. Direction co-occurs with both bounded or unbound paths. Formal terms for direction are included in this notion, as well as particles that indicate *change* in direction.

Particles

The adverbial particles *up, down, away, in, out, over, inside, outside* -- all indicate direction.

- Smoke rose ***up*** from the fire.
- Snakes slither ***down*** into the pit, where the wild boar is trapped.
- Everyday, some unhappy child threatens to run ***away***.
- Mother asked us to come ***in***.

- My older brother took ***out*** his shotgun.
- Bill hit Megan ***over*** the head. (direction: down from above)

Change in direction may be indicated with particles *about, around* and *back.*

- The boat swung ***about.***
- The hunting party turned ***around (back)*** after three hours on the trails.

Prepositions

The prepositions used to indicate bounded paths have the implicit notion of direction bound up in the source and goal end points of the path. Movement is normally *away* from a source and *toward* a goal. The compound prepositions, *into, out of,* also indicate a direction of motion that begins or ends in a region or in an object which can function as a container (having spatial volume), or in contact with an object.

- Michael ran ***into*** the barn when Andy called him. (place-containment)
- Shiela crashed ***into*** a wall with her bicycle. (object-contact)
- He pulled the last kleenex ***out of*** the box.

Adjectives

The words *upward, downward, right,* and *left* can also function as adjectives.

- This ***upward*** trend in the markets is not expected to last long.
- The government's popularity took a ***downward*** spiral immediately after the scandal was reported in the papers.
- Look at the diagram on the ***left*** side of the page.

Adverbs

The cardinal directions *north, south, east, west, north-east, etc.* and directions taken from the body's orientation (my, your) *right, left,* are constant indicators of direction, whereas other directions a determined with reference to specific landmarks, either explicit or implicit. *Inward, outward, upward, downward, rightward, leftward,* indicate a general direction.

- Drive ***north*** on highway #21 until you come to the intersection with highway #15.
- Turn ***right*** at the next set of street lights.
- The snowflakes fell ***downward*** then suddenly swirled ***rightward,*** as a small gust of wind distorted their calm descent.

Path-extent

The *path-extent* relationship links a spatial measure, or coverage of a region, to a path, or to the domain of landscape, a region of land, or an object (spatial or non-spatial).

Phrasal Verbs

The phrasal verbs such as *to extend for, to reach to,* express the path-extent relation.

(Path-extent, continued)

- The valley ***extends for*** forty miles.
- This plantation ***reaches to*** the mountains.

Verbs

Other verbs that convey the extent of a path are *to cover, to reach, to be.*

- This state ***covers*** five hundred square miles.
- The trajectory of the model rocket ***reaches*** 15,000 feet at its highest point.

Prepositions

The prepositions that indicate *full extent* are: *over, throughout, all through.*

- The real estate agent took them ***throughout*** the mansion.
- The property assessor looked ***over*** all the features of the house in detail.

Path-route

A *path-route* relationship indicates a path that borders an object or divides an object to make a path in a spatial scene.

Prepositions

Prepositions such as *along, around, through, across* indicate the path-route relationship.

- The sunlight streamed ***through*** the branches.
- A ship sailed ***along*** the coast of Spain.
- Tina walked ***around*** the house.
- Don't run ***across*** the street without checking for cars.

Emphatic as Nouns

A path may be conceptualized as an object, and may in fact be a concrete entity. Nouns such as: *path, route, road, lane,way, highway, street* indicate an explicit path (with *to, from, between).*

- This is the ***path to*** the hot springs.

Path-reflexive

A *path-reflexive* relationship indicates that the path conveyed through the motion is determined by a self-centered axis.

Particle

The particle, *over*, with a verb like *roll* or *turn* will indicate a reflexive path.

- Roll the log ***over.***
- Bill went to the barbecue to turn the meat ***over.***

Spatial Relations In Text

Spatial messages are often given to describe where an object is located or how to arrive at a location. Conveying an effective spatial message usually involves indicating spatial relationships among several regions and landmarks. Using spatial units of varying degrees of inclusiveness in a description or set of instructions will allow a reader or listener to narrow the search space. For example, if your spatial message involves a building, the regions would be the floor and the rooms within that building. Furniture and other objects within the rooms would be the landmarks. Your message may be clearest if you order the spatial information with regard to a hierarchy of inclusiveness: from the object itself outward to the largest region, or from the largest region inward to the object. Consider these examples:

The Content and Organization of Communication About Object Locations:

by Plumert, Carswell, de Vet, and Ihrig, *Journal of Memory and Language, Volume 34.*

Description of an object's location:

Object first, smallest to largest region or landmark (ascending order):

... the safety pins are **in** a little red box **in** the medicine cabinet **in** the bathroom upstairs.

... the keys are **in** my purse **on** the desk **by** the windows **in** the TV room **in** the basement.

Directions for finding an object:

Largest region or landmark first, largest to smallest in order that the region or landmarks are encountered (descending order):

Missing article: coins

... look **in** the basement **in** the laundry room **on** the washing machine **in** the measuring cup.

Missing article: hairbrush

... look **in** the upstairs bathroom, **on** the bathtub, **next to** the towel.

Spatial Relations in Literary Narrative

Spatial relations are a significant tool for establishing the physical setting in a narrative. They orient places, landmarks and spatial regions to one another, creating a scene.

Text excerpt from *Gone With the Wind* by Margaret Mitchell

It was during these days that Scarlett dreamed and dreamed again the nightmare which was to haunt her for years. ...

She was **in** a wild strange country so thick with swirling mist she could not see her hand **before** her face. The earth **beneath** her feet was uneasy. It was a haunted land, still with a terrible stillness, and she was lost **in** it, lost and terrified as a child in the night. She was bitterly cold and hungry and so fearful of what lurked **in** the mists **about** her that she tried to scream and could not. There were things **in** the fog reaching **out** fingers to pluck at her skirt, to drag her **down into** the uneasy, quaking earth **on** which she stood, silent relentless, spectral hands. Then she knew that *somewhere* **in** the opaque gloom **about** her there was a shelter, help, a heaven of refuge and warmth. But *where* was it? Could she reach it before the hands clutched her and dragged her **down into** the quicksands?

Suddenly she was running, running **through** the mist like a mad thing, crying and screaming, throwing **out** her arms to clutch only wet air and empty mist. *Where* was the haven? It eluded her but it was *there*, hidden, *somewhere*. If she could only reach it! If she could only reach it she would be safe.

Note: The terms in italics *there, where, somewhere* indicate spatial COREFERENCE. See the section on COREFERENCE relations for more detail.

3.4 TEMPORAL RELATIONS

Temporal relations link simple or complex events to time. The subtype relations of the temporal natural class are: temporal-object, chronological, discontinuous, duration, location (past, present, future), proximity, and simultaneous.

Temporal Object Although time is inherently relational, because it is also linear, we can segment it into units of various length. We give it boundaries, conceptualizing it like an object. These expressions are the most ***emphatic*** representations of temporal relations.

Nouns There are a host of nouns that indicate units of time: ***seconds, minutes, hours, days, weeks, months, seasons, years, decade, century, millennium, etc.*** Specific days of the week, months or seasons of the year: *Monday, Tuesday, Wednesday, ... January, February, ... fall, winter, etc.* and specific dates, *July 18, 1993,* also represent temporal objects. Most specific expressions of temporal location are prepositional phrases that have a temporal object following the preposition of location.

- This ***month*** all the farmers plant their seed.
- The worst wars in the history of this planet were fought in this ***century***.

Chronological A *chronological* relation links one event to another in terms of relative order like a path or sequence in the temporal domain. The concept of chronology is similar to the relation: LOGICAL-sequential. All events that occur in a sequence form a temporal continuum. However, some objects and experiences are rated and the sequence has no temporal aspect to it.

Prepositions Prepositions that indicate temporal-chronology are *after* and *before*.

- The mail should all be delivered ***before*** noon.
- ***After*** the last song, we gave the director as standing ovation.

Subordinating Adverbs The subordinating adverbs *then, after,* and *before* indicate a temporal chronological relation between two events.

- The doctor wanted to operate ***before*** it would be too late to save the child.
- ***After*** the rain had fallen, the air smelled fresh and sweet.
- The foreman gave his crew their instructions, ***then*** they all began to work.

(Chronological, continued)

Adverbial Particles

The terms *first, next, then,* sometimes function as adverbial particles.

- ***First*** I need a cup of coffee; ***then*** I'll be awake enough to solve your problem.
- ***First*** one shot rang out, ***next*** two or three, ***then*** it rained bullets.

Adjectives

Temporal objects can be expressed in conjunction with temporal-chronology by using adjectives: *first, second, next, last.* In these types of expressions temporal and logical notions are expressed in combination.

- ***Last week,*** we had the worst snowstorm.
- ***Next month***, the taxes will be due.
- The ***second weekend of the month,*** Amy's father has visiting rights.
- Today marks the ***end of*** my ***first month*** in Canada.

Comparative Series

A temporal adjective, when set in a comparative series can be made to establish a temporal chronology.

- When Alice hosted a dinner party, Max arrived ***late;*** Jeanne arrived ***later;*** Gerald came ***even later yet;*** and Penny was the ***latest.*** Everyone was complaining by the time she arrived, but Alice refused to begin without her.

Verbs

The verbs *precede* and *follow* may indicate temporal-chronology.

- Thunder ***follows*** lightning.
- The music festival ***precedes*** the exhibition by five days.

Duration

A *duration* relation indicates that an extent or span of time has been covered. The link will be followed by a temporal object that is modified by an amount (e.g. six days, nine months).

Prepositions

The prepositions *for, until, till, during* indicate temporal-duration.

- We watched television ***for*** five hours.
- Work ***until*** the bell rings.
- Wait here ***till*** I come back.

Discontinuous

The *discontinuous* relation indicates a global action or attitude, information considered to be a general truth, *independent of time*. In some languages it also indicates a past action which does not affect the present.

Present Tense

In English, the present tense may be used to convey the temporal-discontinuous relation.

- A kilogram ***is*** about 2.2 pounds.
- Good fences ***make*** good neighbors.
- That couple ***want*** it all!
- Those children ***get*** into trouble.

Locative

A *temporal-locative* relation indicates location at a specific point in time.

Tense

In English, all sentences must be inflected with tense at least once. Tense is marked on either an auxiliary, modal or main verb depending upon the sentence construction. In most cases the verb base forms the present tense (with additional agreement marking for the third person singular forms); regularly adds *ed* for past tense and uses the modal auxiliary *will*, the present tense with progressive aspect[3] is used with an adverbial, or the phrase *going to* are used to indicate the future location of the event.

- Present: The children ***play*** in the park.
- Past: They ***played*** in the park.
- Future: They ***will play*** in the park.
- Present-progressive with adverbial: They ***are playing*** in the park ***tonight***.
- Modal: Bob ***can*** give you a lift home.
- Auxiliary: Mark ***was*** studying Spanish everyday. (past-progressive)

There are many irregular verb forms in English which follow a number of patterns in their tense marking. For more detail on tense and aspect marking see the section on MANNER relations (pg in this manual) or consult *Guidelines: A Cross-Cultural Reading/Writing Text* (pg 347-352) and *Critical Reading & Writing for Advanced ESL Students* (pg 365).

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[3] In most descriptive grammars this would be recognized as the present participle. The -ing suffix, however, indicates a MANNER-progressive (continuative) relation, which is syntactically an aspect marking. When the participle occurs in a subordinate phrase, the action associated with it is not always clearly present tense it may actually be temporal-discontinuous.

(Locative, continued)

Prepositions

The prepositions *on, at* and *by* single out a specific point (location) in time, when followed by a temporal-object expression. The preposition *in* also indicates temporal-duration when followed by a temporal-object expression.

- ***On*** Friday, we will come for coffee.
- ***At*** five o'clock, I will meet you in the cafeteria.
- Please have this letter typed ***by*** five-thirty. (deadline)
- ***In*** the summer, we will be making a trip to the ocean.

Subordinating Adverb

The subordinating adverb ***when*** indicates that two events are linked to the same point in time.

- ***When*** Bill arrived home, I had just finished eating supper.
- Bill arrived home ***when*** I had just finished eating supper.

Particles

The particles *now*, and ***right now*** sometimes indicate the immediate point in time.

- Jacque was in trouble. The landlord wanted the rent ***now, right now!***

The adverbial particle ***never*** means *'at no time'* and indicates that an action or event does not or should not occur (or is an exaggerated way of saying that something is a rare occurrence). (cf. LOGICAL-negation.)

- ***Never*** leave a burning fire unattended.
- Our relatives ***never*** come here to visit.

Adjectives

The adjectives *present* and *current*, and the pro-form *this* when functioning as an adjective, all indicate a fairly immediate point in time or temporal object.

- The ***present*** government fiscal policy encourages inflation.
- The ***current*** price for that stock is very low.
- ***This*** week 'Phantom of the Opera' is playing at the Jubilee Centre.

Proximity

The *temporal-proximity* relation indicates an indefinite location in time, for an event, rather than a specific point for its occurrence.

Adverbs

The adverbial use of the words *earlier, later, previously, recently, eventually,* and *soon* are all examples of the temporal-proximity relation.

- Please make an appointment for ***later.*** I can not speak with you now.
- You will have to arrive ***earlier*** if you want a better seat for the concert.

- John is now working for a newspaper. ***Previously***, he had been working for a magazine publisher.

Adjectives

The adjectives *earlier, later, early, late, previous, recent,* and *eventual,* can be used in various expressions of events to indicate their temporal-proximity to another event.

- Renee needed to take the ***earlier*** train, if she expected to be in Chicago by evening.
- The ***recent*** riots in a number of prisons have prompted an inquiry into prison management practises.

Simultaneous

The *simultaneous* relation indicates that two events are occurring at the same time.

Adverbial Particles

The adverbial particles *as* and *while* indicate the temporal-simultaneous relation.

- ***As*** Randy was walking down the street, he whistled a merry tune.
- ***While*** Angie sat reading her book, her kitten, Fuzzie, sat purring at her feet.

Preposition

The word *while* will function as a preposition if an event is nominalized.

- ***While*** eating spaghetti, the young child began to choke.

Temporal Relations In Text

Temporal relations in English tend to be expressed along a continuum of implicit and explicit expression. The explicit indicators of temporal relations, when they occur, are encoded by lexical grammatical categories: adverbs, prepositional phrases or nouns. The marking of tense on the other hand is an implicit indication of temporal location which is obligatory in all text types. This text includes both implicit and explicit expressions of temporal relations. The explicit temporal relations are indicated in bold print, while the implicit temporal relations, expressed by tense marking, are highlighted by italicizing the verbs. It is not the content or meaning of the verb that is significant, but the grammatical category of tense, which indicates the temporal-location of the actions and events expressed by those verbs.

(Temporal Relations in Text, continued)

Unity by Dr. Paul Brand and Philip Yancey

excerpt from *Fearfully and Wonderfully Made* (1980)

The biologist *takes* from an incubator an egg containing a fully developed young chicken. **Just fourteen days ago** this egg *was* a single cell (the largest single cell in the world is an unfertilized ostrich egg). **Now** it *is* a mass of hundreds of millions of cells, a whirlpool of migrating protoplasm hurriedly dividing and arranging itself to prepare for life outside. The biologist *cracks* the shell and *sacrifices* the chick.

Though the embryo *is* **now** dead, some of its cells *live* on. Word *travels* fast through the body, but it *may* be **days before** the far outposts surrender. From the tiny heart the biologist *extracts* a few muscle cells and *drops* them in saline solution. Under the microscope the individual cells *appear* as long, spindly cylinders, crisscrossed like sections of railroad track. Their destiny *is* to throb, and they *persist* even in the anarchic world apart from the body. Each cell *beats* out an incessant rhythm -- pitiful and useless palpitations **when** *isolated* from the chick. But if properly *nourished*, these lonely cells *can* be kept alive.

Unlinked by a pacemaker, the cells *beat* irregularly, spasmodically, each tapping out a rhythm approximate to the 350 beats a **minute** normal to a chick. But **as** the observer *watches*, **over a period of hours** an astonishing phenomenon *occurs*. Instead of five independent heart cells contracting at their own pace, **first** two, **then** three, and **then** all the cells *pulse* in union. There *are* no longer five beats, but one. How *is* this sense of rhythm communicated in the saline, and why?

Some species of fireflies *act* similarly. A wanderer *discovers* a cluster of them in a jungle clearing, flickering haphazardly. **As** he *watches*, one by one the fireflies *fall* into synch **until soon** he *sees* not dozens of twinkling lights, but one light, switched on and off, with fifty branch locations. The heart cells and the fireflies sense an innate rightness about playing the same note **at the same time,** even **when** no conductor *is* present. ...

3.5 PSYCHOLOGICAL RELATIONS

Psychological relations show your personal orientation toward the message that you have created.[4] Psychological relation subtypes include: attitude and emotion. Closely related to psychological relations, yet distinct from them, is your *intent* in sending a message. Your *intent* is also called *illocutionary force,* which is defined as the intended effect of a *speech act* in changing events. For clearly your language activity is aimed at getting results. You give orders expecting them to be obeyed; you request information expecting a response; you make judgements, expecting your audience to agree with your conclusions. Not surprisingly, your attitudes, emotions and intent are directly related to the *degree* of illocutionary force that you communicate. For example, your attitude or emotional state will make the difference between making a demand and a request.

Psychological relations and *intent* are often discussed at the same time in linguistic literature because they are so closely related. Your attitude, emotions and intent become obvious through the connotations of the words you choose and through the grammatical categories and sentence-types you do choose to use, or should choose to use, in certain types of writing.

There are three, apparently universal sentence-types available to encode intent: *interrogative, imperative* and *declarative.* An interrogative sentence-type is typically associated with the speech act of questioning or requesting. An imperative sentence-type is typically associated with the speech act of commanding or instructing. A declarative sentence-type is typically associated with the speech act of making a simple statement or an assertion. English has structural fragments and sentences that are grouped together in a fourth category called exclamations.

INTERROGATIVE SENTENCE-TYPE:

QUESTIONING, REQUESTING, CONFIRMING, SUGGESTING, ORDERING, TESTING, INTERROGATING

IMPERATIVE SENTENCE-TYPE:

COMMANDING, DEMANDING, INSTRUCTING, DIRECTING, RECOMMENDING, ADVISING, ADMONISHING, COUNSELING, SUGGESTING

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[4] These psychological-relational concepts are also relevant to all participants within a conversation or the participants in a text-world created by an author (e.g. characters in fiction). However, making assertions about the psychological orientation of others does not have as integral a part in the organizational structure of the text, as conveying your own orientation to the material.

DECLARATIVE SENTENCE-TYPE:

STATING, ASSERTING, PROPOSING, SPECULATING, ARGUING, COMPLAINING, THREATENING

EXCLAMATORY SENTENCE OR PHRASE-TYPE:

PRAISING, HONORING, ADMIRING, ACKNOWLEDGING

However, in language use, these sentence-types do not bear any one-to-one relationship with the communication *intent.* These sentence types must be interpreted in context. Only then can an author's (speaker's) *psychological relationship* to a message be correctly interpreted. The terms *direct* and *indirect* are often used to indicate that, although the illocutionary force or intent of a speech act is the same, the attitude of the expression differs in politeness. For example, in the context of building a bird house, a father speaking to his child may say either a) or b):

a) *Indirect instruction:* Would you pass me the hammer?
b) *Direct instruction:* Pass me the hammer.

The question format is in fact a polite or indirect instruction. Given the social relationship between a parent and a child, it is unlikely, though not entirely impossible, that a child would or should consider this as a request which may be refused. However, the nature of the instruction is naturally biased towards a request format because the adult needs a tool and wants the child's cooperation in attaining it. Although a parent is an authority figure, the term *command* would be an inappropriate label for the speech act, because that word is associated with a military context.

With this example of how sentence-types convey both the *intent* and the *psychological orientation* of the text-producer to the content of a message, more detail will now be provided concerning the expression of *attitude* and *emotion* through English grammatical devices. It is important that you learn how to structure orders and requests, with varying degrees of directness or indirectness, in order to be appropriately polite, or native speakers may consider your communicative style arrogant. On the other hand, there are situations where it is appropriate for you to be direct and convey confidence in the information that you are presenting. The rules that determine how you express *psychological relations* and *intent* are not sentence level grammatical rules. They are discourse or text-type rules.

Attitude

The *attitude* category reveals either your view of your message or your view of the audience who is to receive it. Some indicators of attitude will show that you consider your message to be true, a fact, and something to be believed. Other indicators of attitude show that a message is second hand, and perhaps, to be doubted. You can also convey that a message is a hypothesis, whose truth is yet to be determined. The degree of politeness and respect that you know is considered socially necessary or you actually feel towards your audience is also associated with grammatical devices that English uses to encode the psychological-attitude relations. English uses a combination of *mood* and *sentence-structure* to convey these relational concepts.

Mood

Mood is the grammatical expression of *attitude* toward the audience through the form of the main verb in a sentence or the use of modal auxiliary verbs. English has three grammatical moods: the indicative, the imperative and the subjunctive.

There are some languages which have a separate mood-marker as the grammatical indicator of the interrogative sentence-type, which distinguishes questions and requests from assertions and declarations (cf. Cope, 1994).

In some languages, indirect speech and information which is second hand or quoted must be expressed in the subjunctive. Use of the indicative in indirect speech, then indicates that the reporter believes that he or she was told the truth. In English, however, the subjunctive is now used less frequently for reported speech.

INDICATIVE

The *indicative* mood in English is used to express statements about real things, to make assertions of events or things which are likely to be fact, to state assumptions, to indicate factual conditions, to gain or grant permission, to state preferences or to question about factual entities. These statements can be made in any of the English tenses.

The attitude conveyed is one of certainty and belief. Unless the text-producer uses intonation or specific connotative words to create a different effect, the indicative mood is fairly neutral and positive.

Declarative statement	◆ John ***walks*** down the sidewalk.
Assertion	◆ Alice ***will come*** to my party tonight.
Assertion of ability	◆ Nichole ***can*** speak three languages.
Factual condition	◆ If you ***come*** to the performance, I ***will give*** you the best seat in the house.
Request for permission	◆ ***May*** I leave the table? (formal) ***Can*** I leave the table? (informal)
Granting permission	◆ You ***may*** proceed with the investigation.

(Attitude, continued)

Permission

- Open fires ***are permitted*** in these campgrounds.
  (Passive structure with performative verb.)

Direct recommendation

- A safety check of your equipment ***is recommended*** before skiing.

Preference

- I ***will*** take this red dress ***rather than*** the blue one.
- I ***will have*** no one ***other than*** Uncle Henry ***give*** the toast to the bride.

INTERROGATIVE STRUCTURE:

In English, requesting information is grammaticized by using the appropriate pro-forms *who, what, why, where, when, how* (cf. also COREFERENCE-question). Yes/No questions require the auxiliary verb or a modal at the beginning. In conversation, a statement format with rising intonation can also indicate a question. Finally, the tag-question and echo-question formats can be used.

Simple requests for information generally convey the belief that the person questioned is able to supply information. In other situations, a question reflects politeness; the speaker does not assume agreement, but seeks confirmation from other participants in the communication situation. In writing, the use of questions gives a casual, conversational tone the the text, as if the author were speaking directly to the audience. In argumentative writing, an author is advised to anticipate questions or statements against his or her own position, include them in the text and answer them, in order to be convincing. However, questions spoken in or written with a certain tone or in used certain contexts (e.g. when the answer is obvious) can also convey mockery, doubt and ridicule.

Request for information

- ***What*** do you eat for breakfast?

Yes/No

- ***Do*** you own a car?
- ***Is*** that your bicycle?

Intonation

- That is your car. ***(Rising intonation)***

Tag question

- You can come with me, ***can't you?***

Echo question

- He left ***what*** at home?

Confirmation

- ***Should*** we climb to the top of the hill?

Ridicule

- ***Haven't*** you learned how to do that yet?

Rhetorical Question

Rhetorical questions do not anticipate an answer, they are in fact assertions that call for agreement. They are rarely used in modern English. In some cases, they express admiration.

- Therefore, I tell you, do not worry about your life, what you will eat or what you will drink, or about your body, what you will wear. ***Is not life more than food, and the body more than clothing?***
  (Jesus: Matthew 6:25 - New Revised Standard Version)

- ***Aren't those roses lovely?*** (!)

IMPERATIVE

The *imperative* mood marking in English conveys the intent or desire to direct the actions of another. It's illocutionary force conveys commands, prohibitions, demands, direct requests, direct recommendations or instructions, and strict requirements. It may also indicate that an action is a necessity or an obligation.

The imperative mood always uses the base form of the verb, usually leaving the subject unexpressed. The subject may be either *you (singular or plural)* or the indefinite forms *somebody, someone, anybody*. An inclusive command uses *let us - let's.* The modal auxiliaries ***must, should, ought to,*** and the idiomatic expression ***to have to do something,*** also express the imperative mood. However, *polite* commands are conveyed as requests, through a question (interrogative) structure.

The imperative often conveys an attitude of urgency or impatience, or a sense of pressure and obligation.

Commands	◆ ***Get*** down from there! *(Note: the exclamation mark follows a command.)*
Inclusive commands	◆ ***Let's get*** out of here!
Emphatic	◆ ***You*** **get** off that equipment, right now!
Direct request	◆ ***Give*** me a drink, please.
Direct recommendation	◆ ***Find*** a new job.
	◆ You ***ought to*** consider some other options.
Direct instruction	◆ ***Heat*** the milk in the microwave on low.
Prohibitive	◆ ***Don't*** go there!
Requirement	◆ You ***must*** complete and mail the form today.
	◆ You ***have to*** complete this course to graduate.
	◆ You ***need*** your instructor's signature on this form.
Granting permission	◆ ***Let*** them enter the building.
Indirect commands	◆ ***Will*** you start reading at the top of the page? (e.g. Teacher to student)
Very polite command	◆ ***Would*** you get out your science notebooks? (e.g. Teacher to students)

SUBJUNCTIVE

The *subjunctive* mood expresses contrary-to-fact conditions, indirect (polite) requests, indirect recommendations, speculation or conjecture (hypothetical concepts), the indication of conditions which are possible but can not be immediately confirmed, and disclaimers, the indication of the degree of probability (belief) or improbability (doubt) that the speaker/writer holds regarding the topic.

The subjunctive uses the simple base form of the verb (either present or past) in the *if - clause,* and *would* or *other modals* are used in the main clause. The past subjunctive form of *to be* is *were* for all persons and numbers.

The subjunctive mood often carries with it an attitude of politeness, regret, doubt or discontentment.

Contrary to fact conditions

- If I ***were*** rich, I ***would*** buy a new car.
- If I ***were*** finished this homework, I ***could*** come with you.
- If he ***were*** more responsible, you ***might*** have been able to depend on him.

Admonition

- Whether it ***be*** now or later, you must eventually pay the debt.

Recommendation

- It is important that our firemen ***be*** prepared to respond quickly to all emergencies.

Indirect requests

- The prosecutor requests that the defendant ***testify*** again.
- The secretary asks that you ***be*** quiet, while you wait for the administrator.

Speculation

- The conservative party ***might*** win the election in this (riding) district.
- ***Should*** this election fail, it will be hard to maintain democracy in the country.

Conjecture

- The motor sounded as if it ***were*** missing a cylinder.
- ***Should*** the field day be cancelled due to rain, it ***could*** be rescheduled for next week.

Disclaimer

- Joe ***may*** arrive at the party (but don't count on it).

Disclaimer in reported speech

- Maria said that she ***would*** come, but I don't believe it.

Verbs

Verbs that indicate attitude are *doubt, believe, respect, ridicule, etc.*

Adverbs

Adverbs that indicate attitude generally fall into two categories: positive and negative. Positive examples are: *thoughtfully, politely, considerately, tactfully, trustingly, etc.;* negative examples are: *arrogantly, rudely, antagonistically, argumentatively, doubtfully, etc.* An adverb like *frankly,* in conversation, warns that the opinion or recommendation may be offensive. (cf. MANNER-basic relations).

Particles

Words like *please, alright* or *okay* act as *down-graders* (that is: expressions that make the force of a speech act less direct). They make the distinction between an order and a request less clear.

- Give me the book, ***okay?***
- Take the garbage out, ***please***.

Emotion

The *emotion* category orients the author emotionally with respect to events, objects, experiences, or the content of a message. The expression of emotion is most significant for the organization of text-structure when it reflects a text-producer's perspective in writing based on personal experience or opinion. In English, this relational concept is expressed primarily through adverbs, adjectives, nouns and verbs.

Mood

The SUBJUNCTIVE mood indicates desires and wishes (specific hopes). In contrast to many other languages, English does not extensively grammaticize emotional orientation in functional categories. There are languages which have separate modal markers to individuate the emotions conveyed by the subjunctive in English. For example, there is an optative marker in Greek (ancient) to convey wishes and desires.

Desires

- If only I ***were taller!***

Wishes

- I wish I ***had*** a new boat.

Particles

Particles such as *oh, ah, really, wow, etc.* are words that convey an emotional response. They can be used effectively in creative writing or narrative conversations, to convey the effects of speech in writing. However, these interjections are considered inappropriate, along with other types of colloquial usage and slang, in formal writing assignments.

Adverbs

Adverbs such as *fearfully, joyfully, proudly, affectionately, happily, sadly, mournfully* indicate emotional orientation.

- ***Fearfully,*** I began writing the exam, wondering if I ***had studied*** enough.

Adjectives

Emotions can be expressed as a property rather than an orientation: *afraid, glad, proud, affectionate, happy, sad, mournful, loving, etc.*

- ***Happy*** as I was to see my uncle, his arrival did upset my plans.

Verbs

English encodes most emotional orientations as reactive verbs: *hate, like, dislike, enjoy, love, hope, fear, want, etc.* These verbs can be followed by an object or an infinitive verbal complex (cf. THEMATIC-experiencer.reactive relations).

- ***I hope*** that people are aware of the limits of science.
- ***I dislike*** confrontational situations.

Nouns

The nouns *hatred, like, enjoyment, love, hope, fear, desire, etc.* often followed by the prepositions *of (something), with (something)* and *for (someone).*

- My ***love of*** writing is not surprizing; it was spawned by my ***enjoyment of*** reading.

(Emotion, continued)

- Jill's ***hatred for*** Marshall increased daily.
- ***Delight with*** my newborn child overwhelmed me.

Psychological Categories that are Nonrelational:

There are many other verbs and nouns that express cognition, evaluation and volition. Though these categories are psychological, they are considered processes, and consequently, are to be classified as nonrelational categories. Naturally, one person's *attitudes, emotions, and psychological processes* can not be discerned by another accurately unless they are conveyed by speech. So, it is interesting to note that similar grammatical patterns are often used to express *communicative actions, psychological processes, and psychological orientation.* This general pattern is called the *Orienter-to-Content* relation (Larson; 1984). Also, in English, some of the verbs that convey communicative actions include *attitude* as part of their meaning (e.g muttering, complaining, discouraging, encouraging, gossiping, etc.).

Psychological Relations and Illocutionary Force in Text

While the expression of psychological relations (attitude and emotion) are possible in any text type, the expression of these categories is more noticeable in instructive or persuasive texts, where the imperative and subjunctive MOOD is common. Samples of each of these two types are provided on the next two pages, with the grammatical indicators of *attitude, emotion* and *intent* highlighted.

In the instructional text sample, the imperative MOOD is indicated by rendering the verb in *bold italics,* as this is the most direct indication of instructions which are obligatory. Recommendations are conveyed less directly through *modal auxiliaries, passive forms of performative verbs,* or *participles* subordinated to main clauses in the indicative. The authors indicate an *authoritative* attitude toward their subject.

Key stylistic features used in the persuasive text sample are: the overt use of *performative verbs*; use of the *imperative* MOOD, softened by use of the *permissive verb* ***let;*** use of the *subjunctive* MOOD and *modal auxiliaries;* and, finally, the author's *direct references* to his own *emotions.*

Instructional Text Sample:

Excerpt from *The Canadian Rockies Trail Guide* by Brian Patton and Bart Robinson

Some Final Words

* Always ***pack out*** all garbage. ***Leave*** nothing behind. ***Bring*** plastic bags or ***pick*** some ***up*** from Parks Canada when *obtaining* a backcountry use permit.

* Never ***leave*** smelly garbage or food around your camp. ***Seal up*** all food and garbage and ***hang*** it in a tree a good 50 metres from your tent.

* Never ***disturb*** living trees or shrubs in setting up camp or building a fire. If dead wood is not available on the ground, ***use*** a stove.

* ***Care should be taken*** with all fires: ***make certain*** they are cold before *being abandoned*. ***Flood*** the fire circle and ***stir*** the ashes with a stick.

* Even where open fires *are permitted*, small stoves using gas, propane or other hydrocarbon fuels *are* often *preferable*. Natural fuels *are dwindling* rapidly around all backcountry campsites.

* While they *are permitted* on a leash, dogs in the backcountry *are ill-advised.* They **can disturb** wildlife and other hikers and **may incite** a grizzly bear to attack.

* Where facilities *are* not *provided*, one's toilet ***should be tended to*** well away from campsites and trails. ***Dig*** a small pit, ***burn*** toilet paper, and ***restore*** the ground **as close as possible** to its original state.

* Never ***pick*** wild flowers or edible plants in a national park.

* ***Be considerate*** of fellow hikers when *sharing* a campsite or back country shelter.

* ***Be considerate*** of horseback riders on the trail. ***Move*** well off the trail, ***remain*** still and ***be prepared to comply with*** the riding guide's requests.

In other words, ***hike*** the wilderness areas of the national parks as an experienced mountain traveller **would,** *displaying* at all times a keen awareness of the diverse and delicate mountain world.

Persuasive Text Sample:

excerpt from *Humanities and Science* (1983) by Lewis Thomas

... **I suggest** that the introductory courses in science, at all levels from grade school through college, **be** radically **revised. Leave** the fundamentals, the so-called basics, aside for a while, and **concentrate** the attention of all students on the things that *are not known*. You **cannot possibly** teach quantum mechanics without mathematics, **to be sure**, but you **can describe** the strangeness of the world *opened up* by quantum theory. **Let it be known** early on, that there *are* deep mysteries, and profound paradoxes, revealed in their distant outlines, by the quantum. **Let it be known** that these **can be approached** more closely, and puzzled over, once the language of mathematics has been sufficiently mastered.

Teach at the outset, before any of the fundamentals, the still imponderable puzzles of cosmology. **Let it be known**, as clearly **as possible**, by the youngest minds, that there *are* some things going on in the universe that **lie** beyond comprehension, and **make it plain** how little *is known*....

Teach ecology early on. **Let it be understood** that the earth's life *is* a system of interliving, interdependent creatures, and that we *do not understand* at all how it works. The earth's environment, from the range of atmospheric gases to the chemical constituents of the sea, *has been held* in an almost **unbelievably improbable** state of regulated balance since life began, and the regulation of stability and balance *is accomplished* solely by the life itself, like the internal environment of an immense organism, and *we do not know* how that one works, even less what it means. **Teach** that.

...Science **may provide** us, one day, with a better understanding of ourselves, but never, **I hope,** with a set of technologies for doing something or other to improve ourselves. **I am made nervous** by *assertions* that human consciousness *will* someday *be unraveled* by research, *laid out* for close scrutiny like the workings of a computer, and then, *and then!* **I hope with some fervor** that we **can learn** a lot more than we now *know* about the human mind, and I *see* no reason why this strange puzzle **should remain** forever and entirely beyond us. But **I would be deeply disturbed** by any prospect that we **might use** the new knowledge in order to begin doing something about it, to improve it, say. This *is* a different matter from *searching* for information *to use* against schizophrenia or dementia, where we *are* badly in need of technologies, indeed likely one day to be sunk without them. But the ordinary, everyday, more or less normal human mind *is* too marvelous an instrument ever to be tampered with by anyone, science or no science.

3.6 LOGICAL RELATIONS

Logical relations join together complex ideas into a text. They include more specific categories that focus or narrow the more general meanings of the categories of *attitude* and *emotion* that are conveyed by mood markers. They also express more exactly the nature of the *psychological processing* that occurs in the mind (e.g. comparing, contrasting, concluding).

Abilitative

An *abilitative* relation indicates that a person or being has the learned or inherent capability to do some action.

Modal Auxiliary

The modal auxiliary *can* indicates the logical-abilitative relation.

- Jonathan ***can*** speak Dutch and English.
- Before the seizure Louise ***could*** remember names easily.

Adjective

The adjective *able* also expresses the logical-abilitative relation.

- Renee is ***able*** to memorize complex equations.

Additive

An *additive* relation signals the addition of an object, person or event to a sequence or group. There is a structural constraint on additive-connectors that the concepts being linked should be expressed through parallel structures.

Conjunction

The conjunction *and* conveys the logical-additive relationship.

- John ***and*** Jack were fighting. (Parallel - joins noun phrases)
- The girls were singing ***and*** dancing. (Parallel - joins verb participles).

Punctuation

When a series is long, *commas* indicate additions, and the word *and* is used only once at the end of the series.

- The old man sold cabbage**,** carrots**,** lettuce ***and*** beets at the market.

Affirmative

An *affirmative* relation indicates agreement, positive response and acceptance of some proposal or fact.

Particles

Words like *yes, indeed, okay, agreed* indicate the logical-affirmative relation.

- ***Yes,*** I want to finish the program this year.
- ***Indeed***, this is a fine specimen.

Adverbs

The adverb *certainly, definitely, etc.* also convey affirmation.

- ***Certainly***, I will cooperate with the plan.

Approximation

An *approximation* relation indicates that an judgement or measure of an amount is estimated rather than exact.

Particles

The particles *about* and *around* indicate approximation.

- It comes to ***about*** five dollars.

Adverbs

Adverbs such as *nearly, almost, practically, roughly* may indicate approximation.

- He was ***nearly*** dead.
- Saving that much money is ***practically*** impossible.

Attemptive

The *attemptive* relation indicates an effort or attempt to carry out an action, but leaves open the possibility that the action was not successful.

Verbs

The verbs *try, attempt, endeavor, seek, strive, undertake* followed by an infinitive indicate the logical-attemptive relation.

- I ***tried*** to arrive on time.
- He ***endeavors*** to be encouraging.

Causal

A *causal* relation is the logical parallel to the thematic notion of a source. It connects the cause of an event to that event. A cause may be another event or the influence of an animate being (cf. LOGICAL-reason). Events or beings who can prevent an action are also the source or cause of restraint or inability.

Subordinating Adverbs

The adverbs *because* and *since* indicate a causal relationship.

- The tree was uprooted ***because*** the storm was so violent.
- ***Since*** the storm was so threatening, no one could go outside.

Verbs

The verbs *make, keep* and *cause* indicate that the subject of the sentence bears a causal relationship to the event.

- Emily ***made*** her mother angry.

- Rebekah ***caused*** Andy to dump the contents of the box.
- Lynette ***keeps*** Lindon practising the piano.

Noun

In nominalized structures the word *cause* is used. This is an emphatic usage.

- The ***cause of*** the fire is still undetermined.
- To be the ***cause of*** so much destruction should make one feel guilty.

Clarification

A *clarification* relation connects ideas that elaborate on a concept to that concept, in order to make it clearer.

Phrases

Phrasal expressions such as: *that is, to clarify, in clarification* indicate the logical-clarification relation. Sometimes this relation type is not mentioned explicitly. Instead, the clarifying concepts are grouped around a topic sentence to form a paragraph.

- Ivan worked hard all day; ***that is:*** he raked leaves, mowed the lawn, pulled weeds and tilled the garden.

Comparative

A *comparative* relation links two concepts in comparisons that may yield judgements of inequality, equality, similarity or proportional measure on some attribute or characteristic.

Conjunctions

The conjunctions *than, like, as...as, the more...the xx-er* indicate comparative relations.

Inequality	◆ Alice is wiser ***than*** Mary (is).
Similarity	◆ George's hat is ***like*** Father's new one.
Equality	◆ Marcel is ***as*** considerate ***as*** Don is.
Proportional	◆ ***The more*** you practise ***the better*** you perform.

Subordinating Conjunction

The word *as* is used as a subordinating conjunction to indicate comparison between two full clauses that each have their own subject and predicate.

- Serene eyes lit up her gentle face, ***as*** a full, pale moon highlights a restful summer's night.

Suffixes

The suffixes **-er** (comparative) and **-est** (superlative) when placed on adjectives indicate unequal comparisons. The -er suffix (with the conjunction *than* either stated or implied) links two items (one may be a group) which are are unequal. The -est suffix is placed on an adjective to report a judgement that one entity is superior to an entire class or category on the basis of that property.

Comparative

- Max is shorter *than* Harry is.

Superlative

- Actually, Max is the shortest of all the men here.

The words ***more (less)*** and ***most (least)*** convey the comparative and superlative forms for adjectives that do not take the -er or -est suffixes.

- This dress is ***more*** beautiful *than* the other one.
- The stallion was the ***most*** magnificent horse he had ever seen.

Adjective

Comparative judgements that result in equality are often expressed with the adjective *same* by itself or in combination with the copular infinitive: *to be the same.*

- The two hats ***are the same.***
- He has the ***same*** amount of money, as I do.

Concessive

A *concessive* relation indicate that the relationship between two events is contrary to expectations.

Subordinating Adverbs

The subordinating conjunctions *although, even though, though,* and *while* indicate a concessive relationship.

- ***Although*** the teacher was angry, he remained calm.
- ***While*** they do not expect to win, the team is delighted to participate in the competition.

Phrases

Phrases which convey essentially the same concessive meaning are: *in spite of, in spite of the fact that, in spite of the possibility that, even if.*

- ***Even if*** they fail, they will still try to complete the excavations before the deadline.

Conclusive

The *conclusive* relation signals that a judgement about a topic or issue will be presented or a form of closure will be brought to a discussion.

Phrases

The phrases *in conclusion,* or *to conclude,* will often introduce the topic sentence of a concluding paragraph.

- ***In conclusion***, the results of the pilot study indicate that children with learning disabilities do not perform as well as their peers on relational processing tasks.

Modal Expression

In English, the statement of grounds for a conclusion, will often be followed by a *so* *it must be* expression stating the conclusion based on those grounds.

- The wind is blowing ***so it must be*** going to rain soon.

Adverb

The adverb *finally* may also introduce a concluding thought or paragraph.

- ***Finally,*** this type of art may be considered an expression of changing values in our culture.

Conditional

A *conditional* relation will indicate an action or requirement that must be fulfilled in order for other events or actions to be permitted.

Correlative Conjunctions

The correlative conjunctions *if...(then),* with the *then* as optional, signal that the concept conveyed is a requirement or condition.

- ***If*** you want good marks, ***(then)*** you will have to study.

Negative Conjunction

The negative indication of conditions is conveyed by the conjunction *unless.*

- ***Unless*** you achieve a certain GPA, you cannot be a graduate student.

Emphatic

The phrases *under these conditions, on one condition, with the condition that* are emphatic markers of the logical-conditional relation.

- I will let you come with me, ***on one condition,*** that you don't embarrass me in front of my friends.

Consequential

A *consequential* relation indicates that one event is the consequence or result of a previous event or action.

Subordinating Conjunction

The subordinating conjunction *so* indicates a consequential link.

- The game was over, ***so*** the crowd dispersed.

The combination *so...that* indicates an attribute or property as resulting in another event or desire.

- Scarlett was ***so*** angry ***that*** she wanted to kill Rhett.

Emphatic

The adverb *consequently,* or phrases like *as a result, as a consequence,* emphasize this relationship.

- An affluent bidder raised my bid another hundred dollars; ***consequently,*** I had to drop out of the bidding.
- You lied to me, and ***as a result***, I do not trust you.

Contradictive

A *contradictive* relation indicates that two concepts or events stand in opposition to each other, in such a way that they negate each other. It also indicates disagreement or denial.

Conjunctions

The conjunctions *but, however, while, nevertheless* indicate a contradictive relation.

◆ Niel said he would wait, ***but*** he did not.

◆ I recognize the sincerity of your attitude; ***nevertheless***, your policy on the issue is incongruent and unethical.

The conjunction *but* can also indicate an attendant circumstance or characteristic that is negative, having the effect of contradicting a previously mentioned positive trait.

◆ Luke is handsome, ***but*** irresponsible.

Particles

The particles *no* and *never* are used in a response to indicate disagreement or denial.

◆ ***No,*** that can not be right!

◆ ***Never,*** it is not acceptable!

Contrastive

The *contrastive* relation is similar to the contradictive relationship, however, it indicates differing or opposing concepts that may complement each other, rather than cancel each other.

Conjunctions

The conjunctions *but, however,while* and *whereas,* may also indicate a contrastive relation.

◆ When it comes to beverages, Eila prefers milk, ***while*** Ann prefers fruit juice.

◆ The first hypothesis is testable ***whereas*** the second is not.

Cross-reference

The *cross-reference* relation is a link specific to written text that signals the reader to review previous concepts related to the current concept, and the link is followed by some indicator of the location of the concept. It is common in scholarly writing.

Abbreviation

The abbreviation *cf.* is an indicator of cross-referencing.

◆ ***cf.*** section 5f for more detail on punctuation.

Emphatic

The expression *see again* or *consider again* followed by location: chapter, section, page number, etc. are other indications of cross-referencing.

Desiderative

A *desiderative* relation indicates desire to carry out an action or event. It is a common indicator of a positive *attitude,* in English.

Verbs

The verbs *want,* and *would like* indicate the psychological-attitude of desire.

- I ***want*** to help you.
- I ***would like*** to complete this today.

Digressive

A *digressive* relation is an indicator that the content is moving away from the text-theme or that the speaker wants to change topic.

Adverbials

Adverbs like *incidentally,* and adverbial phrases like *by the way, off the topic,* will indicate a digression.

- ***Incidentally,*** there was another accident at the corner of 21st and 102nd today.

Note: Although it is common and often natural in conversation, in academic writing, digression from the topic should be avoided. Background information that is related to the topic may appear as a digression unless you clearly state how it supports your theme or argument.

Disjunctive

A *disjunctive* relation indicates that a choice or set of options is available. The negative disjunctive relation indicates than both options are negative.

Correlative Conjunctions

The correlative forms *either... or, whether ....or* , *neither ....nor* and *or* by itself, are indicators of the logical-disjunctive relationship.

- You may eat ***either*** an apple ***or*** an orange.
- We do not yet know ***whether*** the hail damage was severe ***or*** not.
- ***Neither*** his father ***nor*** his mother liked Jack's new girlfriend.

Elaborative

The *elaborative* relation links the content of speech and psychological processes (or psychological relations) to the source or person who produces the content. It signals that some elaboration on the specific content of the processing or speech will follow. The link is often inferred; it is not obligatory in all contexts.

Subordinating Conjunction

The pro-form *that* indicates an elaborative link.

- Andy said ***that*** [Peter would come today].

Punctuation

Where speech is involved, the signal of the content of speech, as a direct quote, is conveyed by surrounding the content with quotation marks (" ").

- Andy said, "Peter will come today."

Prepositions

The prepositions *of, over* and *about* when following the nominalized form of a communicative activity or psychological process will indicate the logical-elaborative link.

- Their discussion ***of*** the policy was about to end.
- Their argument ***over*** who should pay for the damage was silly.
- Your intuitions ***about*** the source of the fire were correct.

Exclusive

An *exclusive* relation signals that a participant or event is an exception to some event or set of conditions.

Conjunction

The conjunction ***unless*** may indicate exclusion from a constraint.

- Everyone should be working on assignment number five, ***unless*** you finished it yesterday.

Prepositions

The prepositions, *except, except for, outside of* indicate various types of exclusion.

- We are all ready to leave ***except (for)*** James.
- The results of this analysis are ***outside of*** the prescribed parameters.

Adverbs

The adverbs ***unusually*** and ***exceptionally*** may be employed to indicate an event, object or characteristic which is exclusive in the sense of being *out of the ordinary*.

- This novel is ***exceptionally*** entertaining.

Exemplification

An *exemplification* relation links the presentation of specific content as support in relationship to a more general claim. Sometimes, the relation is not explicitly marked. Several paragraphs of writing may be examples or illustrations to support a claim.

Phrases

The phrases ***for example, an example is, to illustrate, in support of this claim...*** are indicators of the logical-exemplification relation.

- The overthrow of communism has resulted in a surge of national sentiments; ***for example,*** the civil war between nationalist groups in the former Yugoslavia.

Conjunctions

The conjunctions *like* and *such as* may introduce examples.

◆ Drivers who are often drunk, ***like*** Randal and Ken, should lose their licenses.

◆ The handbook specifies our principles and procedures for hiring and firing, ***such as*** a three month probation period.

Inclusive

An *inclusive* relation indicates that the event or person is within the logical boundaries that encompass an event or that place conditions of acceptability on an event or state.

Prepositions

The prepositions *in, within* and *among* indicate inclusion.

◆ These products are ***within*** the committee's specifications.

◆ Tom's essay is ***among*** the best we've evaluated in this competition.

◆ ***In*** this situation, it is best to proceed with caution.

Verb or Noun as Emphatic

The verb forms *include* and *including* or the noun *inclusion (of)* are emphatic forms for the inclusive relation.

◆ We were all disappointed with the results of the program, ***including*** the new director, Mr. Bondworth.

Intensification

The notion of *intensification* seems to belong generally with the logical categories. It is the marking of emphasis or degree on a concept. It conveys a *psychological-attitude* relation by indicating that the text-producers feelings are affected by the entity.

Particles

The proforms *how, why, what my, such, etc.* are often used in exclamations to indicate intense surprise and excitement or the feeling of shock. These forms are a normal part of conversation or writing that has a conversational tone. They are not usually acceptable in formal, academic writing.

◆ ***How*** obstinate that child is!

◆ ***Why***, that's hard to believe!

◆ ***What*** an exciting performance that was!

◆ He is ***such*** a character!

Adverbs

The adverbs *really, totally, very, so, too, only, etc.* indicate emphasis. In some cases they represent an *extreme* or *excess*.

(Intensification, continued)

- This room is ***totally*** depressing.
- Janet thought that the bouquet of flowers was ***very*** beautiful.
- The red suit was ***too*** expensive; ***even*** the manager thought so.

Interjection

An *interjection* relation indicates the inclusion of a nonrelated or peripheral thought, that may indicate the text-producer's perspective.

Conjunctions

The conjunctions *or so* and *as* may indicate an interjection.

- Tom came once a day, ***as*** I remember those days, to clean out the barn.

Punctuation

An interjection may be signalled by the use of dashes or parenthesis.

- The idea of forgiveness -- which had never been seriously considered by the feuding families -- was encouraged by the new bishop in the parish.

Means

A *means* relationship links an activity or an object too large to be an instrument to accomplish some goal or event.

Preposition

The preposition *by* indicates the logical-means relationship.

- ***By*** donating your small change, you will help our charity.
- The tourist group travelled ***by*** bus and train.

Emphatic

The phrase ***by means of*** emphasizes the means relationship.

- You can contact your family ***by means of*** the internet.

Negation

A *negation* relation indicates a negative or opposing relationship between concepts, the non-occurrence of an event, or the absence of an object or property.

Particles

The particles *no, not,* and ***never*** convey the logical-negation relationship.

- ***No*** relative of mine ever travelled in Egypt.
- The workers did ***not*** consult with me before beginning their shift.
- I ***never*** had your shirt. You lent it to Robert, ***not*** me!

Obligatory

An *obligatory* relation indicates that an action is considered a social obligation or expectation, and not fully voluntary. (cf. MANNER relations, section 3.7, and PSYCHOLOGICAL relations, section 3.5).

Modal Auxiliary

The modal auxiliary ***should*** in some contexts conveys obligation.

- You ***should*** return that book to the library before the due date.

Optative

cf. PSYCHOLOGICAL-emotion-mood (section 3.5)

Permissive

A *permissive* relation indicates an attitude of agreement and acceptance on the part of the text-producer, so that he or she allows some action to occur.

Modal Auxiliary

The modal auxiliary *may* indicates permission.

- You ***may*** leave the room.

Verbs

The verbs *let, allow,* and ***permit*** also indicate permission.

- ***Let*** the children go outside.
- ***Allow*** the competitors to warm up early. It's okay.
- I ***permit*** you to leave early today.

Phobic

cf. PSYCHOLOGICAL-emotion verbs, noun, adjectives, adverbs: expressions of FEAR. (section 3.5)

Possibility

A *possibility* relation marks an action or event as within the range of possible (versus impossible) phenomena.

Adverb & Modal Auxiliary

The modal auxiliary *can* and the adverb *possibly* are often combined to indicate or question possibility.

- ***Can*** you ***possibly*** finish the painting this week?
- I don't know if the problem ever ***could possibly*** be resolved to the satisfaction of all the parties involved.

Adjective

The infinitive plus the adjective form, ***to be possible,*** is another common expression of this relation.

- ***Is it possible*** to reschedule the meeting for next week?

Potential

The *potential* relation expresses the probability that a possible action will in reality occur. This relation has a positive-negative manifestation.

Adverbs

The adverbs *probably, likely, surely* indicate positive potential.

- The shipment of equipment will ***probably*** arrive on time.
- The company is ***likely*** to accept the proposal.

Adjectives

The adjectives *improbable, unlikely, uncertain* indicate negative potential.

- ***It is improbable*** that the Premier will release a press statement before Friday.
- The results of the operation will be ***uncertain*** for a few hours.

Precision

A *precision* relation means the opposite of the *approximation* relation. This link indicates that an event or measure represents the exact condition or amount stated.

Adverbs

The adverbs *exactly, precisely, certainly* indicate logical-precision.

- ***Certainly,*** the director is punctual. He will arrive any minute.
- This ham weighs ***exactly*** twenty pounds.
- An excellent seamstress can judge ***precisely*** the amount of material needed to make a garment.

Purpose

A *purpose* relation indicates the logical goal of an action of an agent. It marks an event as the intended or potential result of another action.

Infinitive

The infinitive marker ***to*** often indicates purpose and the expanded form with the prepositional phrase ***in order (to)*** always indicates purpose.

- Nicholas gave the flowers ***(in order) to*** impress her.

Reason

The *reason* relation is similar to *cause* and *purpose* relations; but it has a slightly different focus -- to indicate the thought or intent that preceded or motivated an action. It also indicates the grounds upon which a conclusion is based.

Conjunctions

The conjunctions *since (if)* or ***because*** focuses on a reason, but often the reason will not be highlighted, rather an ensuing conclusion or result.

- The door is open. ***If*** the door is open, Mary is home.
- ***Since*** the door is open, Mary ***must be*** home.

Return (after Digression)

The *return* relation is a discourse marker that indicates a return to the theme of a text or conversation after a digression or a return to focus on the main character of the story, after providing background or the movements of lesser character.

Adverbs

In some contexts the adverb *now* does not have a temporal meaning, but rather signals a return. The terms *anyhow, anyway, however,* and *nevertheless* are often used to signal a return from a digression.

- ***Now*** Red Riding Hood had been picking flowers and had wandered off the path.
- ***Anyway,*** how do you solve this problem?
- The benefits of nuclear power have been mentioned; **nevertheless,** the focus of this controversy is the long term effects of nuclear accidents that outweigh such benefits.

Phrases

Prepositional phrases such as: *in any case, in this situation, etc.* may also cue a return.

- **In any case,** drafting the policy is our primary concern today.

Serial

A *serial* relation involves a series of links that use numeric or alphabetical order to indicate a ranking for the purpose of establishing priority among concepts or ordering them from least to most important or vice-versa.

Ordinals

Expression of ordinal numerals can use the word or the number.

- ***First,*** we must consider the cost. ***Second,*** we must consider the environmental impact. ***Third,*** we should consider local opinion.
- The agenda for the meeting is: **1)** an update on the membership; **2)** finalization of the main speakers for the conference; **3)** changes in the venue.

Alphabetical Order

Alphabetical order is also used to indicate subpoints in a series.

- The requirement are: **a)**...**b)**...**c)**...

Shift (of subject) A *shift of subject* relation signals a change of topic or theme within a longer text that covers a range of topics.

Paragraphing Devices Change of topic is not always marked with a word or phrase. Chapter and section boundaries, called *blocking* strategies, often implicitly signal a shift in topic. Sometimes an entire sentence or closing and introductory paragraphs will be necessary to indicate the transition properly. *Section Headers;* also indicate shifts of topic.

Adverbs The adverbs *now, now then,* and *well* are indicators of a shift. They are more common in spoken than written English.

◆ ***Now*** no explanation of climate would be complete without some consideration of the marine effect.

◆ ***Well,*** I want to mention our priorities for the next meeting.

Specification A *specification* relation narrows the occurrence of an event to a specific or particular participant.

Adverbs The adverbs *specially, especially, specifically, definitively, particularly,* and *individually* may all convey specification.

◆ Although the whole board objected to the policy, ***especially*** Donavan was angry.

◆ The rate reductions apply ***specifically*** to senior citizens.

Summation A *summation* relation links a summary statement of a complex concept into a text. This relation usually occurs at the end of an essay or chapter.

Phrases The standard phrases for signaling summation are: *in summary,* or *to summarize.* The terms *summary* or *summing up* may be used as a header in extended text.

Header ◆ ***SUMMING UP***

The results of piloting the test-series clearly indicates that it is a valid instrument for measuring relational processing difficulties in ...

3.7 MANNER RELATIONS

The basic manner relation tends to link together conceptually with psychological, logical, spatial and temporal notions. In general, manner indicates a *kind of action* or *the way in which an action or event* occurs.

Some expressions of manner simply indicate the property or quality of an action and do not seem to be important signals for text organization. This is the case for many adverbs in English that take the -ly ending and have a simple property for the root. For example, in the sentence ***She sang beautifully,*** the -ly marker is grammatically necessary to indicate manner, but the root of the adverb *beautiful* does not represent a psychological, logical, spatial or temporal notion. It is not likely, except perhaps in poetry, that the adverb would be foregrounded to function as a text-level connective (e.g. Beautifully she sang??).

In contrast, the adverb *frequently*, not only includes the manner link, but the temporal-logical concept of *regular reoccurrence with brief intervals of time intervening*. This overlap with other relational concepts results in the foregrounding of the adverb to link the entire event with other events (e.g. Bob was an ideal grandson. ***Frequently***, he would stop by his grandmother's house.). It modifies the whole sentence, not just an action.

The manner subtypes are: accidental, avolitional, augmentive, cessative, characteristic, customary, diminuative, frequentive, habitual, inchoative, perfective, progressive, punctiliar, repetitive, unexpected and volitional. The manner-basic link is introduced first, as it involves the most general expression of the relation. The subtypes are all more specific expressions of this basic relation which have been documented as significant in cross-cultural studies of text structure (Peck, 1984; Cope, 1994).

Manner Basic A *manner-basic* relation links a variety of concepts to an action or event to indicate the *way* in which that action or event is conducted.

Suffix The -ly suffix indicates the manner-basic relation.

- The child skated ***smoothly*** across the ice.

Prepositions The prepositions ***with, by*** and ***in*** may link a noun-phrase that expresses manner into the entire sentence.

- He spoke ***in*** a loud, clear voice.
- The nymph shouted ***with*** glee.

Subordinating Adverbs The subordinating appositional compound adverbs *as though* and *as if* indicate that the following clause is a manner expression.

(Manner-basic, continued)

◆ He looked at me ***as though*** I were crazy.

Accidental

The *accidental* category indicates lack of a cause for an action, or indicates that an action or concept is unanticipated, unessential or insignificant.

Adverbials

The adverbs *accidentally, incidentally,* and the adverbial phrases, *by accident, by chance,* indicate the manner-accidental relation.

◆ Bill ***accidently*** fell down the stairs.

◆ ***By chance,*** I met Mary in the store.

Emphatic

The phrases *in a manner that, in a way that* are emphatic indicators of this link.

◆ The defendant looked at the witness ***in a manner that*** made her terrified.

Avolitional

The *avolitional* category indicates that the action is not voluntary. The participant being described or the text-producer is psychologically-oriented against the action and is under some sort of coercion.

Adverbials

The adverbials *unwillingly, against (someone's) will, by force* indicate the manner-avolitional relation.

◆ He left the room ***unwillingly.***

Augmentive

The *augmentive* category indicates that and action or attitude is increasing in volume or force.

Adverbials

Adverbial expression such as *forcefully, increasingly, more and more*indicate a manner-augmentive relation.

◆ The cattle grew ***more and more*** uneasy as the storm approached.

◆ The protestors became ***increasingly*** noisy and violent.

Adjective

The adjective based on the resultative/completive participle form *intensified.*

◆ The noise ***intensified*** as they walked closer to the lab.

Cessative

The *cessative* category indicates that an action, a process or an event stops occurring or is prevented from happening by someone.

Verbs

In English the verbs *stop, cease, arrest, desist, discontinue, halt, etc.* indicate the cessative relation.

Prevention

- The governor ***stayed*** the execution.
- I ***stop*** smiling when I get nervous.
- He ***discontinued*** sending notices, once he knew the man was deceased.

Characteristic

The *characteristic* category indicates that an action occurs in accordance with the nature or character of the participants involved.

Adverbs

In English, adverbs like *typically, characteristically, usually, distinctively* and *distinguishingly* indicate the manner-characteristic relationship.

- John ***typically*** arrives at two o'clock.
- They are a ***distinctively*** *progressive* in their approach to education.

Customary

The *customary* category indicates an action which is culturally or socially significant in its occurrence.

Adverb

The adverb *customarily* expresses the manner-customary relation.

- ***Customarily***, a groom does not see his bride before the ceremony on the day of their wedding.

Expressions

There are a number of other expressions which convey the manner-customary relation: *to be culturally, socially, appropriate...according to custom, as is customary, it is our custom, etc.*

- ***It is culturally appropriate*** to remove your shoes when entering a Buddhist temple.
- ***According to custom,*** someone who knows the deceased well should share a eulogy at the funeral service.

Diminuative

The *diminuative* category indicates that an action is decreasing in volume or impact.

Adverbials

The adverbial expressions *unimportantly, insignificantly, decreasingly* and *less and less* will express the manner-diminuative relation.

- He contributes ***less and less*** to the project each week.

Participial Adjectives

The progressive participles, *decreasing., diminishing, dwindling, etc.,* used in nominalized event structures indicate the manner-diminuative relation.

- The ***dwindling*** donations were cause for concern.

Frequentive

The *frequentive* category indicates that an action occurs several times at short intervals, such that an observer would consider it a regular behavior.

Adverbs

The adverbs *frequently* and *often* indicate the manner-frequentive relation.

- He is ***frequently*** late for class.
- ***Often*** she would walk out to the grave yard and stare at her sister's tombstone.

Habitual

The *habitual* category indicates that a routine action, as a consistent part of a person's lifestyle. The behavior is engrained.

Adverbs

The adverbs *habitually, regularly, always,* and *usually* indicate the manner-habitual relation.

- The president ***regularly*** starts his day by meeting with his administrative assistant.
- John ***always*** orders his coffee black.

Present Tense

Verbs formed in the simple present tense indicate habitual actions.

- John ***takes*** violin lessons once a week.

Verb Compound

Verb compounds formed with *used to* indicate a habitual action in the past.

- I ***used to*** watch three hours of television a day.

Inchoative

The *inchoative* (also called *inceptive*) category indicates that an action is just beginning.

Verbs

The manner-inchoative relation is conveyed by verbs such as: *begin, start, commence,* and *initiate,* when they are accompanied by an event in either an infinitive or nominal structure.

- The senior life guard ***began*** to teach them how to resuscitate a drowned person.
- She ***started*** to cry at the mention of her father's name.

- The crew ***commenced*** building at six in the morning.

Perfective

The *perfective* (also known as *completive*) category indicates that an action is complete. In some languages, it implies that an event will not occur again, but it does not have that implication in English. (cf. *Guidelines* pp. 348-351, for more detail).

Auxiliary plus Aspect (-ed or -en)

The auxiliary verb ***have or had*** plus the -ed or -en suffixes (aspect markers) indicate the *manner-perfective* relation in English.

- I ***have broken*** the vase and it is irreplaceable.
- After Tom ***has played*** this game, he will go swimming with you.

Progressive

The *progressive* (also called *continuative)* category indicates an action which occurred over a period of time in the past or is still occurring at the time of its reporting in the present.

Auxiliary plus Aspect (-ing)

The *copula* (to be) plus the suffix *-ing* indicate the manner-progressive relation.

- Lorraine ***is*** read***ing*** the newspaper.

For more detail on *perfective and progressive* aspect as it interacts with tense, cf. *Guidelines: A Cross-Cultural Reading/Writing Text* (pg 347-352) and *Critical Reading & Writing for Advanced ESL Students* (pg 365).

Punctiliar

The *punctiliar* category marks an action as a single temporal event. In many cases, it implies that the action only happens once and stands in contrast to a progressive or habitual action.

Phrases

English does not mark the manner-punctiliar concept with aspect; instead, phrases like, ***at this (very) moment ... just this once ... this time,*** must be used to specify this meaning.

- ***At this moment,*** Bill is practising the piano.
- ***This time,*** I didn't borrow your car.

Repetitive

The *repetitive* category signals the restatement of a concept for emphasis or clarification.

Adverbials

The adverbial expressions *repeatedly, again, once again* and *once more* indicate the logical-repetition relation.

(Repetative, continued)

- ***Again,*** in this example, we see the adaptability of these tiny creatures.

Unexpected

The *unexpected* category indicates an event or action that occurs contrary to expectations or requirements (complements the LOGICAL-concessive relation).

Adjectives

The adjectives *unexpected, unanticipated, unawaited, unrequired, undue* used with a nominalized action/event often convey the manner-unexpected relation.

- His arrival was ***unanticipated***.

Adverbs

The adverb *unexpectedly* also indicates this type of manner relation.

- The violent storm hit ***unexpectedly***, leaving devastation in its path.

Volitional

The *volitional* category indicates that an action is voluntary and conscious, a choice of the agent involved.

Adverbs

The adverbs *willingly, voluntarily, acquiescently, agreeably, readily* may all indicate the manner-volitional relation.

- John accepted the conditions of the new job ***willingly***.
- Martha resigned from her position ***voluntarily***.

Logical and Manner Relations in Text

Not all words that express manner are significant indicators of textual organization; however, the categories presented in this section have been included in the handbook because they overlap with logical and psychological relations which do contribute to text structure. Logical relation subtypes appear in high numbers within argumentative texts or news reports that present opposing points of view on some issue. Consider the following text samples. The first text, *The Grand Illusion,* is an argumentative essay, which takes the position that reporters are not representative of the average or typical member of society. The second text is a front page news report about the contrasting political positions of Iraq and the U.S. before the Middle East war of 1991, which was later called *Desert Storm.*

The Grand Illusion

by Robert Fulford (1984) - introductory paragraphs only

There is something **slightly** inhuman **and** robotic about the reporters who deliver the news to us on television. **As** a class they do **not** represent humanity. TV news people are **never** ugly. They are **never** old **and** seldom middle-aged. They are **rarely** overweight **or** bald **and** they do **not** wear striking **or** ungainly clothing. They are **never** unhappy **or** ill at ease. They are, **without exception**, middle class: **no** national TV reporter speaks with a regional **or** working-class accent, **or for that matter** a Rosedale honk **or** a Westmount whine. Whatever eccentricities they may have are suppressed. They are chosen **not** to reflect the audience **but** to reflect the way producers believe -- **perhaps with good reason** -- **that** we **want** to see our society represented. They appear to be picked **as carefully as** actors in a play -- **except that** directors of plays often look for striking **or** anomalous characteristics **and** TV news producers **never** do.

The script for television news varies **only slightly** from performance to performance **and** from actor to actor. **As** interviewers, TV reporters ask **roughly** the same questions of successful politicians **and** grief-stricken widows ("How do you feel?"). When they address the audience they maintain an even, cool tone **and** a direct, noncommittal gaze. They are affable **but never** effusive. Their intonation betrays **neither** delight **nor** anger. They are surprized by nothing. They are **apparently never** excited. Someone being interviewed may shout **or** burst into tears -- that makes "good television" -- **but** the reporter will remain calm. **In general** TV reporters take their subjects, **particularly** politicians, less seriously **than** the subjects take themselves. Sometimes, **as with** Peter Trueman of Global **or** Roger Mudd of NBC, this reflects the cynicism of long experience; sometimes it appears to be **nothing more than** a mannerism picked up from other reporters, an attitudinal twitch.

Globe and Mail - Front Page Political News Report - January 5, 1991

Headlines: Iraq accepts U.S. offer **to** meet
But both sides stubborn **about** what issues will be on the table in Geneva

Iraq accepted the U.S. offer of a meeting in Geneva next Wednesday, **even** as the two continued to talk past each other **about** the point of the session.

In a statement on Iraqi television yesterday, Baghdad denounced the United States **for** its "arrogance", **but** said the Foreign Minister Tariqu Aziz **will** travel to Switzerland. There, he will tell Secretary of State James Baker **that** a settlement of the Persian Gulf Crisis requires a solution to the Arab-Israeli conflict.

In Washington, **meanwhile**, the U.S. administration **repeated** its insistence **that** the Geneva meeting will be little **more than** a lecture from Mr. Baker **about** the need **for** Iraq to withdraw **unconditionally** from Kuwait.

"I hope **that** Iraq's acceptance of the meeting indicates a **growing** awareness of the seriousness of the situation and a **willingness to** heed the international community's will **as expressed** in 12 United Nations resolutions." President George Bush said yesterday afternoon. "There can be **no** compromise **or** negotiating on the objectives **contained in** those resolutions."

But in a **possible** slight softening of his tone, Mr. Bush **did** note **that** he has **no** control over what Mr. Aziz brings to the table in Geneva.

Mr. Aziz will be invited to meet senior European Community politicians after his talks with Mr. Baker, the community announced in Luxembourg yesterday after an emergency meeting of foreign ministers.

After wrangling all afternoon **over whether** the 12-nation European group **should** seek direct talks with Baghdad **even if** Iraq rejected Washington's proposal **for** a meeting between Mr. Baker and Aziz, the announcement **that** Iraqi President Saddam Hussein had decided **to** send Mr. Aziz to Geneva saved the community from a publicly embarrassing split.

The British and Dutch foreign ministers had argued **that** any separate European initiative would create the appearance of a split **and** weakened resolve **among** the alliance ranged against Iraq **over** its invasion and subsequent annexation of Kuwait.

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UMI

3.8 COREFERENCE RELATIONS

The term *coreference* means "to refer to the same thing or concept." Coreference relations are established between a pro-form and its antecedent. Pro-forms are words that are content-reduced and bear only a few meaning features (i.e. gender, person, number). They usually refer to a previous word, called an antecedent. We use pro-forms in writing and speech to avoid repetition of the same words over and over again. Using pro-forms and coreference relations make your text more compact and efficient. As you read or listen to a text, you determine the coreference relationship between a pro-form and an antecedent by comparing the agreement features of the pro-form to potential antecedents until you find a match. Sometimes the position that both element holds in their respective sentences, also help you to determine a match.

The ***students***$_1$ (subject position) were given the ***textbooks***$_2$ (object position).
They$_1$ (subject position) were allowed to keep ***them***$_2$ (object position) for two semesters.

Coreference relations usually maintain the identity of a concept or idea that you have already introduced in your writing. An exception to this is *co-reference-relative* forms which are used to link complex events and states to an antecedent for the purpose of establishing the specific identity of a new concept, rather than maintaining the identity of an established one.

The book [***which*** I left on the table] is missing.

When a coreference relation is established such that the antecedent precedes the pro-form, then the pro-forms are called **anaphora**. When a pro-form is used before the normal referring expression and signals anticipation of its appearance, the pro-forms are called **cataphora**. The cataphoric use of pro-forms is usually an exploitation of ambiguity to create suspense in a text or to build towards a climax, as is seen the following example:

She stood looking out of the window. Because *she* was hidden by the semi-sheer curtains, no one could see that *she* was watching.

Most pro-forms that are involved in establishing coreference relations are also marked for thematic relations (cf. section 3.2). They are double functioning items that substitute for other nonrelational concepts that occur elsewhere in a text, while at the same time they fulfil a specific thematic relation within the immediate sentence or clause where they occur.

The coreference relation subtypes are: activity, demonstrative, impersonal, indefinite. numeric/quantifier, personal, possessive, question, reciprocal, reflexive, relative. A brief explanation of expletive proforms is also included in this section.

Activity

The *coreference-activity* relation is an indefinite link that points to an activity antecedent, rather than repeating the specific word that introduced that activity concept. The pro-verb forms also substitute for processes or experiences.

Auxiliary

The auxiliary verb *do* indicates a co-reference-activity link. When the object of the event is also underspecified the word *so* will be used.

- Mike likes to eat pizza and ***so does*** Anthony.
- Barley grows well in this area and ***so do*** many other crops.

Demonstrative

The *coreference-demonstrative* relation provides an indefinite link which points to a concept in either the text-world or the real world. Demonstratives are usually marked with reference to proximity to the speaker's perspective (e.g. *here* - at or near the speaker's location, versus *there* - away from the speaker's location, possibly at the listener's location).

Pro-Adverbs

The adverbs *here, there, right here, over there* are locative demonstratives that point to a place.

- You left your coat ***here.***
- Take a seat over ***there.***

Pro-Adjectives & Pronouns

The following proforms can function demonstratively either as adjectives or nouns: *these, those, this, that, one ... another* (contrast independent of speaker or listener point of view).

- ***This*** book is worth reading. (adjective)
- ***This*** can't be happening to me! (noun)
- **That** is unbelievable! (noun)
- **That** idea is ridiculous! (adjective)
- You have ***one*** plan, but I have ***another***. (adjectives)

Note: The use of demonstratives as nouns is common in English conversation, but is considered ambiguous in many cases in formal writing. It is suggested that nominal use of the demonstrative be avoided. Instead use the demonstrative as a limiting adjective with the noun (i.e. *this* book, instead of *this*).

Impersonal

The *coreference-impersonal* relation indicates that the antecedent is an indefinite, inanimate object or gender-neutral animate being.

Pronouns

The pronoun forms *it, they,* and *one* are subject pronominals that may refer to impersonal antecedents. *It, them,* and *one* are object pronominals. Most descriptive grammars group the impersonal coreference forms with the personal forms. There is overlap in the usage of *they-them* as both impersonal and personal, depending on the antecedent. The impersonal also has possessive forms: *its,* and *their.* When the sex of an animal is not significant to the message, English speakers will often use the impersonal forms (e.g. the pig ... it).

- The **counter** is made of wood. ***It*** was installed yesterday.
- The **problems** truly are serious. We dare not underestimate ***them.***
- The **monster** was hideous. I could hardly stand to look at ***it.***
- Give me **a book**. I want **one** too.
- The **box** is sturdy. ***Its*** sides are reinforced.
- The **tables** were for sale because ***their*** surfaces were scratched.

Indefinite

It is a little strange that the term *indefinite* ever came to be used with respect to a limited set of proforms, as all of them are indefinite. However, the *coreference-indefinite* category usually refers to a generalized event or situation determined by knowledge, rather than a specific textual antecedent or real world referent. The terms are also gender indefinite. This category has proforms which substitute for the majority of the nonrelational categories and the manner category. The indefinite terms are formed by compounding with indefinite terms that *quantify* (cf. also numeric/quantifier): *some, any, every, each, no, all, etc.*

Abstractions & Objects

The pronouns *something* and *anything* are indefinite co-reference terms for abstractions and objects.

- ***Something*** is bothering Sam.
- ***Anything*** would be preferable to sitting here and waiting for the doctor.

Manner

The pro-adverbial forms *somehow, some way, however... this way, that way* (combined with demonstratives) are co-reference terms for underspecified manner.

- Father will get through the storm ***somehow***.
- Approach the job ***this way***.

Persons

The pronouns *somebody, anybody, someone* and *anyone* are indefinite co-reference terms for individuals. *No one* and *nobody* are negative generalizations of exclusion.

Everybody and *everyone* become generalized indefinite references to an entire group within a certain setting.

- ***Somebody*** is parking in my lot.
- ***Someone*** stole my keys.
- ***Everybody*** who went to the concert was impressed.
- ***Nobody*** will argue with your priorities.

Place

The pronouns *somewhere, someplace, anywhere,* and *anyplace* are indefinite coreference terms for place.

- The hat must be ***somewhere*** around here.
- Is there ***anyplace*** where we can buy a cheap meal?

Numeric/ Quantifier

The *coreference-numeric/quantifier* relation uses numbers, measure or quantity to refer to people or objects. The concepts being referred to are not specified for gender differences. This particular function of numeric and quantifier forms is more common in speech and informal writing and should be used in formal writing only if the referent is clearly unambiguous.

Numeric

Almost any number can be used in coreference, as long as the person or object which they represent is not explicitly mentioned within the same phrase. Ordinal forms are also used in this way.

- *Bill and George*, those ***two*** never agree on anything.
- The combo platter offers *three choices*. Which ***ones*** do you want?
- The ***fifth*** (day of the month) is a Saturday. Are you free to go camping?

Quantifiers

Quantifiers that are often expressed as properties (particles/adjectives) may also function as *pronouns* and replace an antecedent. For example: *some, few, each, none, all, many, any, etc.*

- This circus normally visits *cities* all over North America. But this year ***some*** (some of them) banned the show because of protests from local lobby groups who think the circus violates animal rights.
- Children need to be respected for their individuality. ***Each*** has his or her own way of learning.
- If you have borrowed books from the library, ***all*** (of them) must be returned by the end of the semester.

- I wanted to give the child a candy, but I had ***none.***
- ***Any*** of these books will do. Bring the one you want.
- ***Many*** would like to be in your place.

Note: Even when functioning as "limiting adjectives," quantifiers signal the phrase boundary of nominal constructions and so they take on a connective role in the text.

Personal

The *coreference-personal* relation links to an antecedent in written text which is a person or co-refers to a particular participant in a discourse (conversation). Personal proforms in English are agreement marked for first, second, and third person; singular and plural distinctions. They are also case-marked to indicate subject or object position in a sentence. Case marking indicates the thematic-role (cf. section 3.2) that the underspecified pronoun form fills within the immediate phrase or sentence. The agreement features establish the longer range coreference relation to the antecedent in the text or a participant in the conversation.

Pronouns

	Subjective Case		**Objective Case**	
Person	***Singular***	***Plural***	***Singular***	***Plural***
First	I	we	me	us
Second	you	you	you	
Third	he, she	they	him, her	them

- *I* enjoyed the concert.
  (**I** is the subject; THEMATIC-experiencer-reactive.)
- Don't hit ***me*** .
  (**Me** is the direct object; THEMATIC-patient/affected).
- Give the car keys ***to me.***
  (**Me** is object of the preposition; ***To me*** indicates THEMATIC-recipient).
- We showed ***him*** our budget proposal.
  (**Him** is indirect object; THEMATIC-recipient/experiencer.)

Possessive

The *coreference-possessive* relation combines with either personal or impersonal coreference (cf. pages 78-79, on the impersonal possessive) to indicate that the antecedent is an owner (cf. also THEMATIC-possessor relations, pages 26-27). Possessive proforms have a subject and a predicate expression which are marked for person and number agreement.

Pronouns

	Subject (In noun phrase)		**Predicate** (before/after copula)	
Person	***Singular***	***Plural***	***Singular***	***Plural***
First	*my*	*our*	*mine*	*ours*
Second	*your*	*your*	*yours*	*yours*
Third	*his, her*	*their*	*his, hers*	*theirs*

Subject	◆ ***Our*** car is in the driveway.
Predicate	◆ The car in that driveway is ***ours.***
Emphatic	◆ ***Ours*** is the car in that driveway.

Question

The *coreference-question* relation marks either an indefinite relational or non-relational concept for questioning. These pro-forms allow us to question information in relationship to general conceptual structure types (person, thing, place, etc).

Interrogative Proforms

Interrogative proforms for English are: ***who(m)*** *(non-relational-person);* ***what*** *(non-relational-object);* ***where*** *(place/spatial relations);* ***when*** *(temporal relations);* ***how*** *(manner relations);* ***whose*** *(possessive);* ***why, which*** *(logical relations);* ***did*** *or* ***do*** *(non-relational-action).* More specific relations are questioned by using these forms in more complex constructions with prepositions.

Person	◆ ***Who*** is invited to the party?
Object/Thing	◆ ***What*** do you want from the store?
Place	◆ ***Where*** should we go now?
Temporal Relation	◆ ***When*** will father arrive home?
Manner	◆ ***How*** do you build this type of model?
Disjunctive	◆ ***Which*** car is in the driveway?
Reason/Purpose	◆ ***Why*** are you taking this class?
Action/Event	◆ You ***did*** what yesterday?

Indirect Interrogatives

The coreference question relation may also be used to link an interrogative structure to a verb of communication or cognition. In such cases, the question is considered indirect. All of the previous forms may function indirectly, along with, *if...whether...* and... *whether or not;*

◆ Tim doesn't know ***whether or not*** he will take geography as an option.

◆ I asked ***if*** Millicent could babysit.

Reciprocal

The *coreference-reciprocal* relation refers to the individual parts of a plural antecedent, where the action conveyed results in each party affecting the other.

Compound proforms

The compound proforms *each other* and *one another* indicate the coreference-reciprocal relation in English.

◆ The women exchanged gifts with ***each other***.

◆ The children smiled at ***one another***.

Reflexive

The *coreference-reflexive* relation links back to an antecedent when, thematically, the antecedent is both agent and affected in relationship to the action. In many cases it is used to convey a LOGICAL-intensification relation. In English, these forms are created by combining possessive pronoun forms with the word-part *-self* or *-selves*, agreeing with the number feature of the proform.

Pronouns

Reflexive (Objective)

Person	***Singular***	***Plural***
First	*myself*	*ourselves*
Second	*yourself*	*yourselves*
Third	*himself, herself*	*themselves*
Impersonal	*itself*	*themselves*

◆ If I were lonely, I wouldn't stay home by ***myself***.

◆ Sally looked at ***herself*** in the mirrors that covered the wall.

◆ Consider ***yourselves*** hired.

◆ They gave ***themselves*** time off. After all, its their own business.

◆ Don't tell me those dirty dishes walked in here by ***themselves***. (impersonal)

Relative

The *coreference-relative* category links a complex state or event to an antecedent for the purposes of clarifying the identity of the antecedent, which may be a person, or thing (cf. IDENTIFICATIONAL relations, section 3.1). It also links a complex possession, place, manner, or reason expression to another event.

Object

The pronouns *what, which, whatever* and *which* indicate the coreference-relative link to an object. The structural subordinator *that* is allowed to substitute for *which* or

(Relative, continued) *what* in certain positions.

- At MacDonalds, I will buy George ***whatever*** he wants to eat.
- Did you discover ***what*** was wrong with the engine?
- ***What*** he wants is to take three weeks holidays at Christmas.
- Tell me again about the house ***which*** you wanted to buy.
- The clock ***that*** quit working is sitting on the far counter.
- ***That*** he was again overlooked for the promotion was infuriating.

Person The pronouns that introduce a person are *who(m)* and *whoever (whomever).*

- The teacher ***who*** taught me English in Japan is now living in California.
- Invite ***whomever*** you wish to the banquet.
- ***Whoever*** borrowed my dictionary, please return it.

Place The pro-adverbs *where* and *wherever* indicate the relative coreference relation links a complex expression of place to the main clause.

- I put your car keys ***where*** you told me to leave them.
- Let's agree to go ***wherever*** Aunt Margaret wants to go.

Manner The pro-adverb *how* or *however* links a complex manner expression.

- He could not remember ***how*** he survived in icy, cold water.
- Make the coffee ***however*** you like it.

Possession The proform *whose* links a complex expression of possession to an antecedent.

- Dr. Francis, ***whose*** publishing record is outstanding, has been appointed as the new dean.

Reason The proform *why* links a complex reason expression to a communication activity.

- ***Why*** the driver was so careless, we can not explain. He wasn't drunk.

***Expletive** Technically, an *expletive* is not a coreference relator. It is a proform used to provide a grammatical subject for a verb which does not conceptually require one. The verbs which use an expletive form are *seem, appear* and sometimes the copula *to be.* The proforms that function as expletives in English are *it* and *there.*

- *It* seems that the shipment has been delayed.
- *There* is a new policy in the works. (There is not demonstrative in this case.)

Coreference Relations in Text

Coreference relations have a very significant function in extended text. They allow our expression of ideas to be economical and efficient. Pro-forms of various types appear in almost any text type, but they are usually more dominant in literary narratives, where the identity of a variety of characters must be maintained without becoming overly repetitious.

Literary Narrative Text:

Text excerpts from *The Heart of the Matter* by Graham Greene (1948)

He saw a gathering of **his** junior officers in the bar. Fraser was **there** and Tod and a new man from Palestine with the extraordinary name of Thimblerigg. Scobie hesitated to go in. **They** were enjoying **themselves**, and **they** would not want a senior officer with **them**. 'Infernal cheek,' Tod was saying. **They** were probably talking about poor Wilson. Then before **he** could move away **he** heard Fraser's voice. '**He**'s punished for **it**. Literary Louise has got **him**.' Thimblerigg gave a small girgling laugh, a bubble of gin forming on a plump lip.

Scobie walked rapidly back into the lounge. **He** went full tilt into an arm-chair and came to a halt. **His** vision moved jerkily back into focus, but sweat dripped into **his** right eye.

...Scobie thought: **What** are **those others** worth that **they** have the nerve to sneer at **any** human being? **He** knew **every one** of **her** faults. **How** often **he** had winced at **her** patronage of strangers. **He** knew **each** phrase, **each** intonation that alienated **others**. Sometimes **he** longed to warn **her** -- don't wear **that** dress, don't say **that** again, as a mother might teach a daughter, but **he** had to remain silent, aching with the foreknowledge of ***her*** loss of friends. The worst was **when he** detected in **his** colleagues an extra warmth of friendliness toward **himself**, as though **they** pitied **him**. **What** right have **you**, **he** longed to exclaim, to criticize **her**? **This** is **my** doing. **This** is **what I**'ve made of **her**. **She** wasn't always like **this**.

3.9 SOCIAL RELATIONS

Social relations are not often emphasized in English grammar because they are not expressed through functional categories in English, as they are in so many other languages. The subcategories of social relations are: greetings, kinship role, and titles. Kinship roles form a type of classification system, but positions within a kinship system are not joined by the *instance-of* relationship, as the positions in other classification systems are. Instead the various positions within a kinship system are joined by links of mutual or bi-directional possession. Occupational roles also result in the creation of overt titles. Knowing the proper kinship terms and titles is an important part of conveying greetings and initiating a discourse, whether oral or written, with another person. Occupational roles overlap with kinship roles in some cultures. A role is actually a complex concept that includes a combination of relational factors and properties of individuals. The relational factors include social status and social distance between speakers. The fact that one's ability to hold an occupational role at least partially involves the acquisition of skills, qualifications, and attributes, results in a conceptual interpretation of a role as the property of an individual. This dual nature in the conceptualization of social relations/roles is the reason that they are given a separate category rather than being combined with identification relations.

It is an interesting possibility that the nature of the syntactic categories a language uses to express this type of relation may be an indication of the culture's conceptual biases with regard to social structure. English tends to express social relations through the noun category, which is perhaps biased toward the conceptualization of roles as properties of the individual.

Greetings

Greetings may not seem like a social relation, but they are phrasal units with a particular structural function at the discourse level. They are used for signalling the opening and closing of conversations, oral presentations, and written correspondence. They are similar to opening and closing statements and connective devices that signal transitions in other types of discourse. Within a greeting or opening, you can establish your social relationship to the audience. Many greetings, in order to be appropriate, involve the use of kinship terms or titles. While these terms and titles are not grammatically obligatory, from a sentence grammar perspective, it is still necessary to use them in order to construct a well-formed discourse and to conduct socially appropriate communication.

Kinship (Role)

The *kinship* relation links an individual into a position within an extended family classification system. Cultures vary to the degree that the extended family has influence over individual decisions, but all languages have terms for expressing kinship.

Nouns & Possessive Link

In English, kinship is expressed through nouns, like *grandmother, grandfather, uncle, aunt, father, mother, brother, sister, cousin, son, daughter, niece, nephew, etc.* These nouns must then be combined with some connective indicator that conveys possession (i.e. Possessive proforms, the preposition *of,* the possessive marker - *'s.*)

- Mr. Cauldon is ***my uncle***.
- Alex is the ***father of*** Maureen.
- Michael***'s mother*** is standing right beside him.

Relations that are determined by marriage use the expression *-in law* and *-half* or *step* for sibling relationships.

- Mr. Brandt is ***my father-in-law***.
- Sally is ***my step-sister*** *(half-sister).*

Titles

A *title* links the person being referred to or being addressed into a position within the social system of the culture. The most basic title an individual carries is his or her personal *names.*

Other social areas that develop titles for leadership-subordinate positions are: *government, education, religion, medicine, business,* and *the military.* These categories will not be dealt with in depth in this manual.

Personal Name

The structure of the person name follows the pattern: *given name, middle name(s)* and *family name.* The title ***Mr.*** is used to precede an adult male's name, whether married or single. Youth (under legal age are rarely addressed with these titles.) The title ***Miss*** or ***Ms.*** may both indicate a single woman, although older, single women prefer ***Ms.*** (regardless of whether they have ever been previously married). Married women these days choose between ***Mrs.*** or ***Ms.*** Some keep their father's family name (used with Ms.) or hyphenate their family name with their husband's family name, when they marry. Middle names are usually only included on official forms, often indicated by initials only. Elders may call those younger than them by first name, but in most cases youth address their elders with these basic titles, unless the elders are their parents. Last names only (preceded by the) may be used when referring to a family or couple.

- ***Ms. Landholm*** is the grade two teacher.
- The ***Roberts*** are our new neighbors.

Social Relations in Text

Social relations are manifested in some way in every text type. The author of this narrative text sample uses titles and differences in the English dialect to authentically reflect the social differences involved among the characters in his story. The main character, *Major Scobie,* is the *deputy-commissioner* of the police, in a West African colony during World War II. In this text except, he is being brought up to date on affairs at the police station by his sergeant. Titles and address terms are indicated in bold print. Dialect variations are indicated in italics unless they overlap with address terms.

Literary Narrative Text:

Text excerpts from *The Heart of the Matter* by Graham Greene (1948)

He sat down at his bare table and almost immediately his Mende **sergeant** clicked his heels in the doorway. '**Sah**?'

'Anything to report?'

'The **Commissioner** *want* to see you, **sah**.'

'Anything on the charge sheet?'

'Two black men *fight* in the market, **sah**.'

'Mammy trouble?'

'Yes, **sah**.'

'Anything else?'

'**Miss Wilberforce** *want* to see you, **sah**. I *tell* her you *was* at church and she *got* to come back *by-and-by*, but she *stick*. She *say* she no budge.'

'Which **Miss Wilberforce** is that, **sergeant**?'

'I don't know, **sah**. She *come* from Sharp Town, **sah**.'

'Well, I'll see her after the **Commissioner**. But no one else, mind.'

'**Very good, sah**.'

Note: *sah* is the dialect form for *sir*, which is a common address term used by subordinates to superior officers within the police core.

3.10 NONLITERAL RELATIONS

Nonliteral relations are defined in contrast to the *literal* relations which have been defined in the previous sections. They are secondary relations that override the normal relations that would be established between the elements that constitute a complex idea and result in a secondary interpretation of that conceptual unit. The secondary relations, in a sense, freeze the unit into a whole, which then receives an interpretation which is unique, rather than formulated from its parts. The subcategories of nonliteral relations are: formulaic, idiom, metaphor, metonomy, and symbolic.

Formulaic *Formulaic* relations are established when a phrasal unit (collocation) requires a specific particle or preposition to accompany a verb, noun or adjective[5] or a specific preposition heads an adjunct phrase (i.e. a phrase not required by the verb (LOGICAL, TEMPORAL, SPATIAL, etc.).

Logical Adjunct

◆ ***In conclusion***, ...

◆ ***For example***,...

Phrasal Verb

◆ I have to ***wait for*** my bus at this transfer station.

◆ Scientist ***experiment with*** the variables that they isolate.

Phrasal Adjective

◆ I am ***angry with (at)*** Harry (someone).

◆ I am ***angry about*** the proposal (something).

◆ They ***get angry over*** such insignificant things. (something).

Note: Greetings and titles are also formulaic expressions, but they are categorized under SOCIAL relations and are explained in section 3.9.

Idiom In the case of most *nonliteral-idiom* structures, the thematic relation between an action and its affected object are frozen into a single unit with a new interpretation. In other cases, a verb and particle combination receive a secondary interpretation. Many idioms fall under the category of colloquial usage. They are common in speech but are often considered inappropriate in formal writing.

VP Idiom

◆ The old man ***kicked the bucket***. *Literal:* ... died.

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[5] These are called syntactic subcategorization restrictions in generative grammar. There are many types of collocation restrictions specific to each language; this manual focusses only on those that involve function words.

Phrasal Verb Idiom ◆ Her expectations ***blew*** me ***away***. *Literal:* ... surprised, astonished

Metaphor

Metaphorical relations are established by using the equivalence relationship between two concepts which are clearly not equivalent and would not normally be classified together. The text producer compares these contrasting concepts in order to attribute some of the characteristics of one concept to the other. The reader or listener, assuming the writer or speaker's intelligence, realizes that equivalence is not intended and then processes all the features of the contrasting concept to gain a richer interpretation of the initial concept.

◆ *Trust was a dead language of which he had forgotten the grammar.*
(Graham Greene)

The ability to trust is compared to the ability to speak a language. The character's inability is conveyed through the words *dead* and *forgotten.*

◆ *We squat before television, the idol of our cherished progress.* (Student)

For this student, television is compared to a false god, questioning the value of the progress that it represents. Understanding this metaphor is dependent upon culture specific values regarding religious expression (Kane, 1983).

Metonomy

The most common expression of the *metonomy* relationship is established when the conceptual relationship between a part and a whole is exploited to the point where the part is allowed to substitute for the whole. However, other cases where one conceptual category is allowed to function as representative of another category (form-functions as) may also be considered metonymy.

Part as Whole ◆ All ***hands*** on deck. (Part - hands; Whole - bodies/persons)

Place for People ◆ ***Iraq*** accepted the **U.S.** offer to meet... (Political)

Symbolic

Symbolic relations are prominent in poetry and literary text. In symbolism, the term for a concrete object is used to represent an abstract concept. Some types of symbolism is culturally determined and other types are specific to an author.

◆ I love you with all my **heart**.
(the heart is use to symbolize love, the seat of the emotions)

Nonliteral Relations in Text

A prominent example of effective use of nonliteral relations in extended text, is Mark Twain's use of extended metaphor comparing a river to a book in his essay *A River Pilot Looks at the Mississippi.* The text demonstrates a complex interweaving of the characteristics of the river with the characteristics of a book. The skilled river pilot is literate in the language of the river, whereas the average passenger is illiterate. The concepts of author, language, message and communication give the river an almost human quality (personification):

A River Pilot Looks at the Mississippi by Mark Twain (1875)

The face of the water, in time, became a wonderful book -- a book that was a dead language to the uneducated passenger, but which told its mind to me without reserve, delivering its most cherished secrets as clearly as if it uttered them with a voice. And it was not a book to be read once and thrown aside, for it had a new story to tell every day. Throughout the long twelve hundred miles there was never a page that was void of interest, never one that you could leave unread without loss, never one that you would want to skip, thinking you could find higher enjoyment in some other thing. There was never so wonderful a book written by man; never one whose interest was so absorbing, so unflagging, so sparkling renewed with every re-perusal. The passenger who could not read it was charmed with a peculiar sort of faint dimple on its surface (on the rare occasions when he did not overlook it altogether); but to the pilot that was an *italicized* passage; indeed it was more than that, it was a legend of the largest capitals, with a string of shouting exclamation points at the end of it, for it meant that a wreck or a rock was buried there that could tear the life out of the strongest vessel that ever floated. It is the faintest and simplest expression the water ever makes, and the most hideous to a pilot's eye. In truth, the passenger who could not read this book saw nothing but all manner of pretty pictures in it, painted by the sun and shaded by the clouds, whereas to the trained eye these were not pictures at all, but the grimmest and most dead-earnest of reading-matter.

Now when I had mastered the language of this water, and had come to know every trifling feature that bordered the great river as familiarly as I knew the letters of the alphabet, I had made a valuable acquisition. But I had lost something, too. I had lost something which could never be restored to me while I lived. All the grace, the beauty, the poetry, had gone out of the majestic river! ....

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Appendix 4

Sample Documents

Consent Forms

Reading Guide for Reviewing Teachers

Demographic Information Form

Exercise Questionnaire

Handbook Questionnaire

Teacher Report Forms

Questions for Field-Testing Teachers

Form #1

Staff Consent Form to Participate in Research

This is to state that I agree to participate in a research project conducted by Cynthia Caswell, a masters student at the University of Alberta.

- I understand that the research has the following objectives with respect to teachers:

  1) to gain formative evaluations from ESL teachers on the usefulness of a handbook on English language connectivity that emphasizes factors in relational processing, relational structure and the meaning behind grammar.

  2) to gain formative evaluations from ESL teachers on the usefulness of a set of exercises in English language connectivity for advanced ESL students.

- I understand that I have been asked to:

  1) read the preliminary drafting of the teacher's version of *An ESL Handbook on Relational Structure* and survey the set of exercises in *Text Profiles in English Language Connectivity,* with assistance of a reading guide and be prepared to be interviewed regarding the questions set out in the reading guide.

  2) make recommendations regarding the adjustment of material in the handbook for the student version, as also stated in reading guide.

  3) be interviewed for 45 minutes to share my evaluations and recommendations with the researcher/curriculum developer.

- I understand that I will be provided a copy of the interview transcript for member check purposes to confirm that data from the interview has been accurately transcripted and that I will be asked to provide feedback regarding the researcher's analysis of the interview.

- I understand that the administrator who supervises me is generally supportive of these research goals has already consented to provide time within my work schedule to participate in this research, but the decision to participate is my own.

- I understand that the data from this study will be used for masters research and will be published in a masters thesis.

- I understand that my participation in the study is totally anonymous.

- I understand that my participation in the study is completely voluntary. I am free to withdraw my consent and discontinue participation at any time without giving notice and without negative consequences.

- I understand that I am participating in this research to contribute the perspective of an experienced ESL practitioner in the research and development process for new writing resource materials for ESL teachers and students and that this study has no further motive with which I have not been acquainted.

I HAVE CAREFULLY STUDIED AND I UNDERSTAND THIS AGREEMENT. THEREFORE, I FREELY CONSENT AND AGREE TO PARTICIPATE IN THE STUDY.

Name:________________________ Signature: ______________________________

Date: ________________________

Form #3

Staff Consent Form to Participate in Research

This is to state that I agree to participate in a research project conducted by Cynthia Caswell, a masters student at the University of Alberta.

- I understand that the research has the following objectives with respect to teachers:

  1) to gain formative evaluations from ESL teachers on the usefulness of a handbook on English language connectivity that emphasizes factors in relational processing, relational structure and the meaning behind grammar.

  2) to gain formative evaluations from ESL teachers on the usefulness of a set of exercises in English language connectivity for advanced ESL students.

- I agree to be involved in piloting the handbook and exercises in an authentic class setting and have been asked to:

  1) familiarize myself with the teacher's and student's versions of *An ESL Handbook on Relational Structure* and spend approximately 20 to 30 minutes in class introducing the students to the format of their version of the handbook at the beginning of the session (more detailed guidelines and recommendations will be provided). I am also asked to be prepared to answer any questions the students may have regarding effective use of the handbook during the session.

  2) choose three options from the set of exercises in *Text Profiles in English Language Connectivity* and use them in the classroom, as I am able to coordinate them with the regular program. This requires approximately 40 to 45 minutes per exercise.

  3) allow time for and administrate the questionnaires where students respond to the exercises immediately after completing the exercise (approximately 15 minutes).

  4) allow time for a student evaluation of their handbook (15 minutes); and possibly a group discussion with them at the end of the session (20 minutes), if they are willing.

  5) be interviewed to share my experiences in working with the materials. Short interviews of 15 minutes will be conducted on or near the day during which the exercises have been used, and a final 30 minute interview will be conducted at the end of the session.

  6) review a copy of the interview transcripts and the analysis of the transcript to verify the accuracy of the information and to provide feedback on the analysis.

- I understand that beyond these requirements I am free to use other features of the handbook, as I find them useful for teaching revising and editing skills. The decisions about further use are at my discretion and I will be willing to inform the researcher regarding any other spontaneous uses of the handbook by myself or students during the session during the final interview.

- I understand that the researcher/curriculum developer will be available to answer any questions I have about employing materials in the classroom before the session begins.

- I understand that the administrator who supervises me generally approves of these research goals and has already consented to the materials being piloted in the classroom, but my participation in the study is my own decision.

- I understand that the data from this study will be used for masters research and may be published at a later date.

- I understand that my participation in the study is totally anonymous.

- I understand that my participation in the study is completely voluntary. I am free to

Form #3

withdraw my consent and discontinue participation at any time without giving notice and without negative consequences.

- I understand that I am participating in this research to contribute the perspective of an experienced ESL practitioner in the research and development process for new writing resource materials for ESL teachers and students and that this study has no further motive with which I have not been acquainted.

I HAVE CAREFULLY STUDIED AND I UNDERSTAND THIS AGREEMENT. THEREFORE, I FREELY CONSENT AND AGREE TO PARTICIPATE IN THE STUDY.

Name:__________________________ Signature: ______________________________

Date: __________________________

Student Consent Form

Consent Form to Participate in Research

This is to state that I agree to participate in a research project conducted by Cynthia Caswell, a Masters student at the University of Alberta.

- I understand that the research has the following objectives with respect to ESL students:

1) to gain student opinion on the usefulness of a handbook on English language connectivity, that emphasizes relational structure and the meaning behind grammar.

2) to gain student opinion on the usefulness of advanced exercises in English language connectivity

- I understand that I will be asked to:

1) fill out a questionnaire giving my opinions about some exercises on English language connectivity that are used in the class. Time will be provided within the class to fill out the questionnaire.

2) fill out a questionnaire giving my opinions about the handbook *An ESL Handbook on Relational Structure.*

3) support my opinions with reasons as much as possible.

- I understand that I will be given a copy of the handbook *An ESL Handbook on Relational Structure* for the duration of the course and that the teacher will provide an introduction to its structure and effective use. I understand that I am free to use the handbook as a resource in my individual writing, revising and editing tasks and in group work. The number of times that I use the book in such settings is at my own discretion.

- I understand that the administrator of this institution and the teacher of my class have previously assessed these materials, have had a role in their development and consider them appropriate to this level of ESL reading/writing course work. Their use in the classroom is approved and under the direction of the teacher as part of the course.

- I understand that participation in the research will not in any way affect my grades in the course.

- I understand that the decision to provide a response to these materials is completely voluntary. I am free to withdraw my consent and discontinue participation at any time without giving notice and without negative consequences.

- I understand that my participation in the study is totally anonymous.

- I understand that the data from this study will be used in a masters thesis and may be published at a later date.

- I am indicating on this form whether or not I would be willing to participate in a group (class) discussion or be interviewed about the manual.

Student Consent Form

(Please circle yes or no)

a) I am willing to participate in a class discussion (20 minutes). yes no

b) I am willing to be interviewed at the end of the term (15 to 20 minutes). yes no

- I understand that I am participating in this research to contribute the perspective of an ESL student in the research and development process for new writing resource materials for ESL teachers and students and that this study has no further motive with which I have not been acquainted.

I HAVE CAREFULLY STUDIED AND I UNDERSTAND THIS AGREEMENT. THEREFORE,
I FREELY CONSENT AND AGREE TO PARTICIPATE IN THE STUDY.

Name:____________________ Signature: ____________________

Date: ____________________

Reading Guide

Introduction: This material is in the preliminary drafting stages, there are still many additions and refinements to made. Your patience with the rough edges is appreciated. *An ESL Handbook on Relational Structure* is a resource and is **not** intended to be read from cover to cover with the students. It is a handbook to assist in revising and editing. It also serves to support the exercises in *Text Profiles in English Language Connectivity.*

The following questions are intended to help focus your reading/survey of the handbook and the sample exercises to assist in a formative evaluation.

1. The Relational Processing Theory Section of the Handbook:

a) Familiarity Level:
How familiar is this theory to you? Have you been exposed to it in your training? Through other handbooks?

b) Usability Level:
Would you want to use principles from this theory in the classroom? Why or why not? In what types of activities would you encourage the use of this type of handbook? (Please note a student version will be constructed.)

c) Readability Level:
Please comment on the readability of the material for ESL Teachers.
What recommendations would you make for adjusting the readability of the theory section for a student handbook for the 7th level? 6th level? Please state why.

2. The Relational Categories Section in the Handbook:

a) How appropriate is language level and vocabulary:
for ESL teachers? for ESL students at the 7th and 6th levels?

b) Are the examples appropriate? Extensive enough? Why or why not? Can you make recommendations to improve them?

c) There are text samples, in which a specific natural class of relations is highlighted, at the end of each section. No analysis is provided, as of yet. Would ESL teachers prefer to have an answer key for these samples? Would students at the 7th or 6th levels be expected to attempt this kind of analysis?

d) The index is presently a mix of relational terms, syntactic categories, and specific connective words and phrases of English. Would a separate index for each area be more useful or helpful? Why or why not?

3. The material is organized conceptually not grammatically:

a) Do you see any benefits or hindrances in this type of organization?

b) The organization of the handbook is intentionally rigid and repetitive in that each section involves a general introduction, definitions of relational subcategories and then examples of specific English words (by grammatical category) that are used to express the relation. This format is intended to make each section self-contained so that the reader does not have to do a lot of reading to locate the right information. Do you think the format works for its intended purpose? Why or why not?

4. The Sample of Exercises:

a) How do you rate the sample of exercise-types for usefulness with regard to the following criteria:

i) general suitability for a writing class in comparison to sentence level and and sentence combining exercises?

ii) potential for teaching awareness of English connectivity patterns?

iii) potential for teaching recognition of connectivity errors in editing cycles?

iv) potential for teaching revision strategies that require awareness of connectivity?

v) potential for contributing to better connectivity choices in initial drafting?

b) What do you recommend with regard to exercise sequencing and potential ways to employ the exercises, with regard to:

i) the comparative difficulty of the exercise types?

ii) exercise length and skill level ?

iii) time limits on exercises and skill level?

(In this case the skill level would be the difference between the 6th and 7th levels).

c) There are no analysis exercises in the sample at the moment. Would guided analysis exercises be useful?

d) What is your opinion of the use of the relational categories in the answer keys and the record sheet for error pattern analysis? Why?

5. Would teachers benefit from more explicit explanations of how relational processing theory supports the exercise designs?

Student Demographic Information

Name: ____

Age: ______________________ **Gender:** M F

1st Language: ____

Other languages (beside English) ________________________________

Educational Background: ____

____

____

____

____

Previous English language training: _______________________________________

____

____

____

Please rank the following language skills from highest (5) to lowest (1):

reading_______

writing _______

listening________

speaking________

spelling_________

Student Questionnaire #1 - Response to Exercises Page 1

Exercise Type: ____________________ **Student Research No.**________

Topic: ________________________ **Name:** ____________________

Your response to the following questions from *your individual perspective* will provide important data on the usefulness of the exercise you have just completed. Your responses will be used to help determine the suitability of this type of exercise for advanced ESL reading/writing students.

In most cases you will indicate your response by circling ONE POINT ONLY on this five point scale:

1 = strongly disagree; 2 = disagree; 3 = agree; 4 = strongly agree; 5 = unable to judge.

You will also be asked to briefly state the reason for your response. Your reasons are significant to the research. Please answer as completely as possible.

Example:

	strongly disagree	disagree	agree	strongly agree	unable to judge
1. Advanced ESL students aready know how to recognize English connectives.	1	2	3	4	5

State reasons: *We have been practising combining sentences and know the connectives that combine many sentences.*

	strongly disagree	disagree	agree	strongly agree	unable to judge
1. This exercise is an appropriate task for 6th/7th level ESL students.	1	2	3	4	5

State reasons:____

	strongly disagree	disagree	agree	strongly agree	unable to judge
2. I learned something new about English language connectivity.	1	2	3	4	5

State an example:____

Student Research No.________

	strongly disagree	disagree	agree	strongly agree	unable to judge
3. The written instructions for this task are clear and easy to follow.	1	2	3	4	5

State reasons:____________________

	strongly disagree	disagree	agree	strongly agree	unable to judge
4. This type of exercise can help ESL students learn editing skills.	1	2	3	4	5

State reasons:____________________

	strongly disagree	disagree	agree	strongly agree	unable to judge
5. This type of exercise can help ESL students learn revision skills.	1	2	3	4	5

State reasons:____________________

	strongly disagree	disagree	agree	strongly agree	unable to judge
6. This type of exercise can help ESL students learn to write better.	1	2	3	4	5

State reasons:____________________

Student Research No.________

	strongly disagree	disagree	agree	strongly agree	unable to judge
7. This exercise makes learning English grammar more meaningful.	1	2	3	4	5

State reasons:____

____

____

____

	strongly disagree	disagree	agree	strongly agree	unable to judge
8. There was enough time given to do this exercise.	1	2	3	4	5

State reasons:____

____

____

____

	strongly disagree	disagree	agree	strongly agree	unable to judge
9. The vocabulary in this exercise was appropriate for the 6th/7th level.	1	2	3	4	5

State reasons:____

____

____

____

	strongly disagree	disagree	agree	strongly agree	unable to judge
10. I was satisfied with my performance on this exercise.	1	2	3	4	5

State reasons:____

____

____

____

Student Research No.________

	strongly disagree	disagree	agree	strongly agree	unable to judge
11. I think that more of this type of exercise would be useful in a 6th/7th level ESL class.	1	2	3	4	5

State reasons:____

____

____

____

	strongly disagree	disagree	agree	strongly agree	unable to judge
12. There needs to be more discussion and explanation with this exercise.	1	2	3	4	5

State reasons:____

____

____

____

13. If you could change anything about this exercise what would it be?

____

____

____

____

14. Is the format and visual appearance of the task distracting in any way? Please explain.

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Student Research No.________

Other Comments: ____

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Questionnaire on Student Handbook **Student Research No. _____**

Your response to these questions will provide research data and valuable information which will determine the usefulness of *An ESL Handbook on Relational Structure* as a resource for advanced ESL students. Please respond to the questions as thoroughly as possible.

Circle the letter of the response which most accurately indicates your situation.

1. Approximately how often did you independently use the handbook during the session?

(Note: one time of usage would be the event of looking up a word or a category in the handbook or picking it up to read in it. *Independently* means not related to one of the class exercises lead by the teacher.)

a) 1 to 5 times
b) 6 to 10 times
c) 11 to 15 times
d) 16 to 20 times
e) more than 20 times
f) 0 times

Place a check mark beside any statement which indicates a way that you used the handbook.

2. In what circumstances did you use the handbook?

______ a) I used the handbook only when the teacher did exercises related to it.

______ b) I read sections of the handbook because of my personal interest.

______ c) I used the handbook when making writing decisions for initial drafts on my writing assignments.

______ d) I used the handbook when making revisions to my writing.

______ e) I used the handbook when editing final drafts of my writing.

______ f) I used the handbook in peer-revision situations, where I commented on the organization and ideas in other students' writing.

______ g) I used the handbook in peer-editing situtations, where I commented on issues related to English grammar in other students' writing.

______ h) Other: (please explain) ____
____
____

Circle only ONE option on the scale

Student Research No. ________

	strongly disagree	disagree	agree	strongly agree	unable to judge
3. The vocabulary in this handbook is suitable for 6th/7th level ESL students.	1	2	3	4	5

State reasons:

	strongly disagree	disagree	agree	strongly agree	unable to judge
4. The definitions in this handbook were clear.	1	2	3	4	5

State reasons/examples:

	strongly disagree	disagree	agree	strongly agree	unable to judge
5. The examples in this handbook were clear.	1	2	3	4	5

State reasons/examples:

	strongly disagree	disagree	agree	strongly agree	unable to judge
6. The examples in this handbook were useful.	1	2	3	4	5

State reasons:

Student Research No. ________

	strongly disagree	disagree	agree	strongly agree	unable to judge
7. There were **not enough** examples in this handbook.	1	2	3	4	5

State reasons:____

____

____

	strongly disagree	disagree	agree	strongly agree	unable to judge
8. It was easy to find the information that I needed when I used the handbook.	1	2	3	4	5

State reasons:____

____

____

	strongly disagree	disagree	agree	strongly agree	unable to judge
9. The text samples at the end of the natural class sections were helpful.	1	2	3	4	5

State reasons:____

____

____

	strongly disagree	disagree	agree	strongly agree	unable to judge
10. A handbook that is organized by conceptual structure is better than a handbook organized by grammatical categories.	1	2	3	4	5

State reasons:____

____

____

Student Research No. ________

Mark (X) the appropriate answer.

11. I have used many other reference books (e.g. dictionaries, grammar books, handbooks on idiomatic expressions).

Yes ______
No - only a few _______
No - none at all ______
Only a dictionary ______

Mark (X) the appropriate answer.

12. Did you read section 1 - the introduction to the handbook?

yes - I read it thoroughly. ________
*yes - I skimmed through it .*________
no - I didn't read it ________

13. Did you read section 2 - the overview on relational structure?

yes - I read it thoroughly. ________
*yes - I skimmed through it .*________
no - I didn't read it ________

14. Did you attempt the exercise on page 13?

yes ______
no ______

15. Did you use the **index** when trying to locate information?

often _______, sometimes, ________, a few times, __________, never, _________

Other comments: ____

____

____

____

____

Teacher Report Form on Exercise Use in Classroom

Exercise Number:___________ **No. of Students** ______________

Date used: _____________ **Approx. time of day** _____________

Teacher Name: __________________________________

1. **What steps did you take to take to introduce the exercise?**

2a. **What strategy did you use to have the students complete the exercise**(i.e. individual, group work, class discussion, or some combination etc.)?

2b. **How long did it take to complete the exercise?**

3a. **What strategy did you use in giving feedback on the exercise?**

3b. **How long did it take to give feedback on the exercise?**

4. **Was there any particular aspect of the exercise that you chose to emphasize? Why?**

5. **Were the results fairly random or were their biases in the students' performance on the task?**

6. **Did you make reference to the handbook or use the handbook at any time, when giving feedback on the exercise? Explain briefly.**

7. **How did the students respond to the exercise in comparision to other tasks and assignments so far in the term?**

8. **If they had any questions or made any comments that were particularly noteworthy, and you remember them, please indicate them.**

9. **How did you find the materials to work with?**

10. **Any other comments?**

Teacher Report on Handbook Introduction

No. of students present ______________

Date: _____________ **Approx. time of day** _____________

Teacher Name: __________________________________

Please give a brief outline (point form is fine) of how you introduced the handbook to the class.

Guidelines for Interview Questions - Main Field Testing Teachers

1. What criteria did you use for choosing the exercises you used?
2. Based on your experiences, what would you recommend for more effective start up with the materials and more effective integration ? (e.g. able to use on student writing?)
3. Questions from the reading guide: exercises - comparative difficulty, time limits, vocabulary, etc. Are there any general or specific comments you would like to make about the exercises you used?
4. What was the student response to the materials you used, as far as you could tell?
5. What kinds of helps/explanations are needed to help the teacher integrate the approach with the classroom curriculum? pre-service or inservice training? (Suggest a few possiblities for confirmation. e.g. More information on how options relate to text structure?)
6. Get feedback from the teachers on the discussion of the distractors.
7. How can the answer keys and instructional strategies be improved? Usefulness?
8. Did you notice any relationaship between student performance on the exercises and their writing ability? Explain.
9. What was your experience with the students regarding the amount of independence or teacher support required/expected?
10. Did the materials help you understand anything in a deeper/better way -- about your students' reading and writing?
11. Get teacher opinion on use of rational option and rational gap task in tandem.
12. Any students taking TOEFL at the same time? Effects of TOEFL on student reaction?
13. Get confirmation on reading/writing ability of independent users of handbook.